STATE OF MISSOURI

SEVENTEENTH and EIGHTEENTH ANNUAL REPORTS

OF THE

PUBLIC SERVICE COMMISSION

FOR YEARS ENDING NOVEMBER 30, 1929, AND NOVEMBER 30, 1930

COMMISSIONERS

MILTON R. STAHL, Chairman Almon Ing J. H. Porter S. M. Hutchison J. Fred Hull

JEFFERSON CITY, 1930.

MISSOURI PUBLIC SERVICE COMMISSION

COMMISSIONERS

MILTON R. STAHL, Chairman. ALMON ING
David P. Janes, Secretary. Moberly Mary Fidler, Assistant Accountant. Mrs. Hazel Benefiel, File Clerk. Wylna C. Owen, Stenographer. Marshfield Dessie Davis, Stenographer. Lydia Wilmesherr, Clerk. Washington Lucile Wright, Stenographer. Moberly Maryville
MABY FIDLER, Assistant Accountant. MRS. HAZEL BENEFIEL, File Clerk. WYLNA C. OWEN, Stenographer. DESSIE DAVIS, Stenographer. LYDIA WILMESHERR, Clerk. LUCILE WRIGHT, Stenographer. Maryville
I DO AL DEDARTMENT
DEGAL DEFAILURENT
D. D. McDonald, General Counsel. Lebanon J. P. Painter, Assistant Counsel. Milan Helen Williams, Stenographer. Jefferson City
ENGINEERING DEPARTMENT
F. M. Plake, Chief Engineer. B. F. Schaberg, Assistant Engineer. W. K. Freudenberger, Assistant Engineer. J. E. Flanders, Assistant Engineer. J. Ben Blanton, Assistant Engineer. M. Drazen, Assistant Engineer. St. Louis H. E. Roberts, Assistant Engineer M. M. Burley, Assistant Engineer M. M. Burley, Assistant Engineer M. M. GCOMMICK, Assistant Engineer C. D. Ppice, Assistant Engineer R. A. O'Niell, Assistant Engineer R. A. O'Niell, Assistant Engineer M. Schumacher, Assistant Engineer M. Schumacher, Assistant Engineer M. J. Reiber, Assistant Engineer C. L. Martin, Assistant Engineer Kansas City C. L. Martin, Assistant Engineer T. K. Huggins, Assistant Engineer M. Bodner, Assistant Engineer M. Bodner, Assistant Engineer M. J. Bodner, Assistant Engineer M. J. Bodner, Assistant Engineer M. J. Bodner, Assistant Engineer Mebb City M. Prouse, Assistant Engineer Mebb City M. Prouse, Assistant Engineer Mebb City Mebb City

R. C. CRAVENS, Assistant Engineer	Rolla
C. M. OLIVET, Assistant Engineer	Webb City
L. E. BATY, Assistant Engineer	Carthage
G. E. LINDERSMITH, Assistant Engineer	. Carl Junction
C. M. Custer, Assistant Engineer	
WM. G. KENNEDY, Assistant Engineer	
ALLEN CUNNINGHAM, Assistant Engineer	
A. E. Bodner, Assistan. Engineer	Webb City
WM. WOODWORTH, Assistant Engineer	Joplin
GEORGE J. WILLIER, Assistant Engineer	
MINOR HENRY, Assistant Engineer	Joplin
M. H. Jones, Assistant Engineer	. Carl Junction
K. L. Dooley, Assistant Engineer	
F. L. RICKENS, Assistant Engineer	Joplin
D. W. SIMMONS, Assistant Engineer	Webb City
W. C. Simmons, Assistant Engineer	
L. E. WILLIAMS, Assistant Engineer	Kansas City
C. P. Becker, Assistant Engineer	Kansas City
L. E. Jones, Assistant Engineer	Saverton
B. COHEN, Assistant Engineer	Kansas City
W. R. Insley, Assistant Engineer	
L. W. Roberts, Assistant Engineer.	
M. D. Bodine, Assistant Engineer.	
A. E. Wilson, Assistant Engineer	
J. V. Andrews, Assistant Engineer	
H. G. BERKEY, Assistant Engineer.	
HARRY CAPLAN, Assistant Engineer	
J. V. Suddath, Assistant Engineer.	
G. R. Gilcrest, Assistant Engineer	
W. W. GARST, Assistant Engineer	
MARGUERITE GILLOGLY, Clerk	
NOVA LEE SMITH, Stenographer	
MARJORIE CASEY, Stenographer	
MARY H. FENTON, Stenographer	
IRMA-L. BROWN, Stenographer	
EVA HAMILTON, Stenographer	
VICTORIA DEGRAFFE, Stenographer	
JANE Ellis, Stenographer	
CLARA HARRIS, Stenographer	
KATHLEEN McIntyre, Stenographer	
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TRANSPORTATION DEPARTMENT	
V. E. SMART, Chief Rate Expert	Infforman City
H. F. CHOLET, Assistant Rate Expert.	
MARTHA HEISINGER, Stenographer	
WIANTHA II DISINGER, Stenographer	.seneraon Ony
ACCOUNTING DEPARTMENT	
	Toffonger Otte-
H. W. Ross, Chief Accountant.	Jenerson City
A. L. HOULEHAN, Assistant Accountant	
GEO. B. COLEMAN, Assistant Accountant	
H. B. Lysaght, Assistant Accountant.	
A. J. BARAGIOLA, Assistant Accountant	
M. J. McDonough, Assistant Accountant	
B. D. CORNETT, Assistant Accountant	warrensburg

JOHN O. FREDMAN, Assistant Accountant. Jefferson City J. D. Senevey, Assistant Accountant. H. P. Niedermeyer, Assistant Accountant. Edmund H. Neu, Assistant Accountant. Kansas City H. W. Montgomery, Assistant Accountant. Skidmore Hazel Gove, Stenographer. Jefferson City
ELECTRIC LIGHT, GAS, HEAT AND WATER DEPARTMENT
R. E. Duffy, Chief Electric and Mechanical Engineer. Greenfield Lucille Hollerorth, Clerk. Jefferson City Adele Trippensee, Stenographer. Jefferson City
TELEPHONE AND TELEGRAPH DEPARTMENT
W. W. Johnson, Telephone Expert
MOTOR BUS DIVISION
Edwin S. Austin, Supervisor. Jefferson City Arthur S. Nelson, Bus Inspector. Kansas City Ethelyn Katzer, Stenographer. Sedalia
OFFICIAL COMMISSION REPORTERS
Gertfude Nelson, Official Reporter. Jefferson City Floy Ing Smith, Official Reporter. Hutton Valley Mary Luetkewitte, Official Reporter. Jefferson City Herbert H. Hoff, Reporter of Opinions. Perryville Ella Creel, Stenographer. Hutton Valley Grace Scott, Stenographer. Jefferson City
JANITORS
Andy Richmond

General Offices: First Floor, Capitol Building, Jefferson City, Mo.

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LETTER OF TRANSMITTAL

STATE OF MISSOURI

PUBLIC SERVICE COMMISSION

Jefferson City, Mo.

To His Excellency, Henry S. Caulfield, Governor of Missouri.

Dear Sir: I have the honor to transmit the Seventeenth and Eighteenth Annual Reports of the Public Service Commission of Missouri, covering the biennium from November 30, 1928, to November 30, 1930, inclusive.

Very respectfully yours,

MILTON R. STAHL, Chairman.

(8)

STATE OF MISSOURI

17th AND 18th ANNUAL REPORTS

OF THE

PUBLIC SERVICE COMMISSION

Statement by the Commission:

The Commission is now composed of Milton R. Stahl, St. Louis, Chairman; Almon Ing, Poplar Bluff, Butler County; Samuel M. Hutchison, Kansas City, Jackson County; John H. Porter, St. Louis, and J. Fred Hull, Maryville, Nodaway County. The only changes in the personnel of the Commission during the last biennial period were the appointments of Milton R. Stahl and J. Fred Hull to succeed Dudley F. Calfee, Jefferson City; Cole County, and James P. Painter, Milan, Sullivan County, respectively.

During the period of this biennial report 1,159 formal cases were filed, 1,038 of which were disposed of during the period, leaving 121 pending. Many cases left pending at the date of the last biennial report have been disposed of during the period of this report. Some of the cases now pending on the docket will have been disposed of before the publication of this report; others are pending by reason of continuances requested by the parties, or are being held up by appraisals and audits. Many of the pending cases are awaiting answer and the lapse of sufficient time for setting.

In addition to the formal cases, the Commission handles a large number of complaints by correspondence and conferences. These are termed informal cases. 345 of these cases were filed during the period of this report and 273 have been disposed of.

The Commission, during the past two years, has been very active in the appraisal and audit of public utility properties. The expense of making such appraisals and audits is not payable by the State Treasury but is charged against the utilities under investigation. Heretofore the Commission has been restricted in this important work by insufficient appropriations out of fees earned. The Fifty-fifth General Assembly increased our appro-

priation for this purpose, and the following table of fees collected from utilities during the last three biennial periods for appraisals and audits evidences our increased activity in this work:

1925 - 1926	1927-1928	1929-1930
\$85,018.74	\$67,218.59	\$315,371.02

The reports of the Engineering and Accounting Departments set this forth in greater detail. Never in the history of the Commission have so many appraisals and audits been in progress at any given time as at the end of this biennial period. It is the purpose of the Commission to make valuations of all the important utility properties in the State, and it is hoped that the Fifty-sixth General Assembly will increase our appropriation out of fees earned to enable us to do this.

Among the most difficult cases before the Commission during the period of this report were those involving rates of the St. Louis and Kansas City Street Railway systems. Like practically every street railway system in the United States, both of these systems have been losing revenue passengers every year for a long period. The industry is a victim of the evolution in transportation. Nevertheless it is rendering an essential service and must be maintained. The Commission, on its own initiative, inaugurated new fare schedules in St. Louis and Kansas City designed to yield additional revenue without increasing the rate of fare to the regular rider.

In St. Louis the casual rider pays a ten-cent fare, but the regular rider may purchase a ticket for \$1.00 good for one calendar week entitling the holder to 12 rides. When the twelve rides are exhausted the holder may ride for the balance of the week at five cents per ride by presenting the ticket. In Kansas City the casual rider also pays a ten-cent fare, but the regular rider may purchase a pass for forty cents good for one calendar week, which entitles the holder to ride for five cents by presentation of the pass. Thus the more the regular rider uses the service, the less is the cost per ride. This is an application for the first time in Missouri to street railway rates of the principle underlying water, electric, gas, and steam heating schedules that the rate should decrease with increased use of the service. The Commission feels that the new schedules have been successful in operation and have been received favorably by the riding public.

The income of the Commission from one source was appreciably decreased during this biennial. The Commission receives a fee for the approval of bond issues and of notes and other evidences of indebtedness due more than one year from date. These fees are appropriated for the support of the Commission. Due to the condition in the money market public utilities have not financed themselves through bonds, but by stock issues from which the Commission receives no fees. The following table shows the fees earned by the Commission from this source:

1925 - 1926	1927 – 1928	1929–1930
\$34,126.30	\$36,794.10	\$22,692,40

The Commission feels that its usefulness to the people could be increased if its appropriation were sufficient to enable it to employ inspectors to investigate utility service throughout the State. Undoubtedly some rural communities are suffering from inadequate service which could be remedied by expert advice. These conditions ordinarily do not reach the Commission until the matter has progressed to an intolerable state. inspectors these conditions could be corrected more speedily and at less expense and the general standards of utility service could be raised. Such inspectors could give expert advice and aid to small telephone, electric, gas and water utilities which are unable to engage trained engineers, and would more than pay for themselves in the improved services which the public, particularly in smaller communities, would receive. These inspectors could also see that rate schedules on file with the Commission are being observed and that the orders of the Commission are being obeyed.

The reports of the separate departments of the Commission follow:

HISTORICAL

Appointments—Time of Service of Each Commissioner—Membership of the Commission to December 1, 1930.

The law creating the Missouri Public Service Commission was introduced in the legislature by Senator William G. Busby, of Carroll County, and became effective April 15, 1913. By its provisions the Commission shall consist of five (5) members to be appointed by the Governor, with the advice and consent of the Senate, one of whom shall be designated by the Governor to be Chairman of the Commission. One of said Commissioners shall hold office for two years, two shall hold office for four years and two shall hold office for six years; upon the expiration of each of said terms each Commissioner thereafter appointed shall hold office for a term of six years. Vacancies in said Commission shall be filled by the Governor for the unexpired term.

Effective April 15, 1913, there were appointed:

Frank A. Wightman, railroad expert, of Monett, Mo., for a term of two years, ending April 15, 1915.

John Kennish, lawyer, of Kansas City, Mo., for a term of four years, ending April 15, 1917.

Howard B. Shaw, electrical engineer, of Columbia, Mo., for a term of four years, ending April 15, 1917.

JOHN M. ATKINSON, lawyer, Chairman, of Doniphan, Mo., for a term of six years, ending April 15, 1919.

WILLIAM F. WOERNER, lawyer, of St. Louis, Mo., effective July 3, 1913, for a term ending April 15, 1919.

WILLIAM F. WOERNER, resigned, effective November 18, 1914; and Edwin J. Bean, lawyer, of DeSoto, Mo., effective November 19, 1914, was appointed for the unexpired term, ending April 15, 1919.

Frank A. Wightman, resigned, effective April 24, 1915; and Eugene McQuillin, lawyer, of St. Louis, Mo., effective April 24, 1915, was appointed for a term ending April 15, 1921.

JOHN M. ATKINSON, Chairman, resigned, effective May 1, 1916; and WILLIAM G. BUSBY, lawyer, of Carrollton, Mo., effective May 1, 1916, was appointed for the unexpired term, ending April 15, 1919, and named Chairman of the Commission.

EUGENE McQuillin, resigned, effective February 21, 1917; and

DAVID E. BLAIR, lawyer, of Joplin, Mo., effective February 26, 1917, was appointed for the unexpired term, ending April 15, 1921. Resigned August 23, 1920, effective immediately.

NOAH W. SIMPSON, lawyer, of LaBelle, Mo., effective April 15, 1917, was appointed for a term ending April 15, 1923, vice John Kennish, whose term had expired.

EDWARD FLAD, civil engineer, of St. Louis, Mo., effective April 15, 1917, was appointed for a term ending April 15, 1923, vice Howard B. Shaw, whose term had expired. Resigned, effective October 11, 1921.

A. J. O'REILLY, civil engineer, of St. Louis, Mo., effective October 11, 1921, was appointed for the unexpired term ending April 15, 1923.

John Kennish, lawyer, of Kansas City, Mo., effective August 23, 1920, was appointed for the unexpired term, ending April 15, 1921. Resigned, effective December 1, 1920; and

John A. Kurtz, lawyer, of Kansas City, Mo., effective December 1, 1920, was appointed for the unexpired term ending April 15, 1921. May 1, 1921, was appointed for a full term of six years, ending April 15, 1927, and named Chairman of the Commission, vice William G. Busby, resigned. Died June 17, 1923; and

MERRILL E. Otis, lawyer, of St. Joseph, Mo., effective June 23, 1923, was appointed for the unexpired term, ending April 15, 1927, and named as Chairman of the Commission. Resigned, effective August 15, 1924.

WILLIAM G. BUSBY, Chairman, resigned, effective May 1, 1921; and

Hugh McIndoe, lawyer, of Joplin, Mo., was appointed for the unexpired term, ending April 15, 1925. Died May 28, 1923; and

RICHARD H. MUSSER, lawyer, of Plattsburg, Mo., effective June 16, 1923, was appointed for the unexpired term, ending April 15, 1925.

THOMAS J. BROWN, lawyer, of Charleston, Mo., effective June 13, 1923, was appointed for a term ending April 15, 1929, vice Noah W. Simpson, whose term expired April 15, 1923. Named Chairman of the Commission, effective August 30, 1924, to succeed Merrill E. Otis, Chairman, resigned, effective August 30, 1924.

Almon Ing, lawyer, of Poplar Bluff, Mo., effective January 14, 1925, was appointed for the unexpired term, ending April 15, 1927, of Merrill E. Otis, resigned. Reappointed during recess of legislature for full term from April 15, 1927, to April 15, 1933. Named Chairman, effective October 1, 1928, vice Thomas J. Brown, Chairman, resigned.

- D. F. Calfee, lawyer, of Jefferson City, Mo., was appointed January 15, 1925, for the unexpired term, ending April 15, 1929, for A. J. O'Reilly, assuming the duties February 4, 1925.
- S. M. Hutchison, lawyer, of Kansas City, Mo., effective April 15, 1925, was appointed for a term ending April 15, 1931, vice R. H. Musser, resigned.
- J. H. Porter, engineer, of St. Louis, Mo., effective June 26, 1925, was appointed for a term ending April 15, 1931, vice Edwin J. Bean, resigned.
- J. P. PAINTER, lawyer, of Milan, Mo., effective October 1, 1928, was appointed for a term ending April 15, 1929, vice Thomas J. Brown, resigned.

MILTON R. STAHL, lawyer, of St. Louis, Mo., effective May 29, 1929, was appointed for the term ending April 15, 1935, and named as Chairman of the Commission, vice D. F. Calfee, whose term expired April 15, 1929.

J. FRED HULL, editor, of Maryville, Mo., effective May 29, 1929, was appointed for the term ending April 15, 1935, vice J. P. Painter, whose term expired April 15, 1929.

Membership of the Commission for the period of time named:

From April 15, 1913, to July 3, 1913: John M. Atkinson, Chairman; John Kennish, Howard B. Shaw, Frank A. Wightman.

From July 3, 1913, to November 18, 1914:
John M. Atkinson, Chairman;
John Kennish,
Howard B. Shaw,
Frank A. Wightman,
William E. Woerner.

From November 18, 1914, to April 24, 1915: John M. Atkinson, Chairman; John Kennish, HOWARD B. SHAW, FRANK A. WIGHTMAN, EDWIN J. BEAN.

From April 24, 1915, to May 1, 1916:

John M. Atkinson, Chairman; John Kennish, Howard B. Shaw, Edwin J. Bean, Eugene McQuillin.

From May 1, 1916, to February 21, 1917:

WILLIAM G. BUSBY, Chairman; John Kennish, Howard B. Shaw, Edwin J. Bean, Eugene McQuillian.

From February 21, 1917, to February 26, 1917:

WILLIAM G. BUSBY, Chairman; JOHN KENNISH, HOWARD B. SHAW, EDWIN J. BEAN.

From February 26, 1917, to April 15, 1917:

WILLIAM G. BUSBY, Chairman; John Kennish, Howard B. Shaw, Edwin J. Bean, David E. Blair.

From April 15, 1917, to August 23, 1920:

WILLIAM G. BUSBY, Chairman; Edwin J. Bean, David E. Blair, Noah W. Simpson, Edward Flad.

From August 23, 1920, to December 1, 1920:

WILLIAM G. BUSBY, Chairman; EDWIN J. BEAN, NOAH W. SIMPSON, EDWARD FLAD, JOHN KENNISH. From December 1, 1920, to May 1, 1921:
WILLIAM G. BUSBY, Chairman;
EDWIN J. BEAN,
NOAH W. SIMPSON,
EDWARD FLAD,
JOHN A. KURTZ.

From May 1, 1921, to October 11, 1921:
JOHN A. KURTZ, Chairman;
EDWIN J. BEAN,
NOAH W. SIMPSON,
EDWARD FLAD,
HUGH McINDOE.

From October 11, 1921, to April 15, 1923:
John A. Kurtz, Chairman;
Edwin J. Bean,
Noah W. Simpson,
Hugh McIndoe,
A. J. O'Reilly.

From April 15, 1923, to June 13, 1923:
John A. Kurtz, Chairman;
Edwin J. Bean,
Hugh McIndoe,
A. J. O'Reilly.

From June 13, 1923, to June 16, 1923: John A. Kurtz, Chairman; Edwin J. Bean, A. J. O'Reilly, Thomas J. Brown.

From June 16, 1923, to June 17, 1923:
JOHN A. KURTZ, Chairman;
Edwin J. Bean,
A. J. O'Reilly,
Thomas J. Brown,
Richard H. Musser.

From June 17, 1923, to June 23, 1923:
Edwin J. Bean,
A. J. O'Reilly,
Thomas J. Brown,
Richard H. Musser.

From June 23, 1923, to August 15, 1924:

MERRILL E. OTIS, Chairman;

EDWIN J. BEAN,

A. J. O'REILLY,

THOMAS J. BROWN,

RICHARD H. MUSSER.

From August 15, 1924, to January 14, 1925:

THOMAS J. BROWN, Chairman;

EDWIN J. BEAN.

A. J. O'REILLY,

RICHARD H. MUSSER.

From January 14, 1925, to February 4, 1925:

THOMAS J. BROWN, Chairman;

EDWIN J. BEAN,

A. J. O'REILLY,

RICHARD H. MUSSER,

ALMON ING.

From February 4, 1925, to March 2, 1925:

THOMAS J. BROWN, Chairman;

EDWIN J. BEAN,

ALMON ING.

D. F. CALFEE,

RICHARD H. MUSSER.

From March 2, 1925, to April 17, 1925:

THOMAS J. BROWN, Chairman;

ALMON ING.

EDWIN J. BEAN,

D. F. CALFEE,

From April 17, 1925, to June 15, 1925:

THOMAS J. BROWN, Chairman;

EDWIN J. BEAN,

ALMON ING,

D. F. CALFEE,

S. M. HUTCHISON.

From June 15, 1925, to June 26, 1925:

THOMAS J. BROWN, Chairman;

ALMON ING.

D. F. CALFEE.

S. M. HUTCHISON.

From June 26, 1925, to December 1, 1926:

THOMAS J. BROWN, Chairman;

ALMON ING.

D. F. CALFEE,

S. M. Hutchison,

J. H. PORTER.

From December 1, 1926, to October 1, 1928.

THOMAS J. BROWN, Chairman;

ALMON ING,

D. F. CALFEE,

S. M. Hutchison,

J. H. PORTER.

From October 1, 1928, to June 1, 1929:

ALMON ING, Chairman;

D. F. CALFEE,

S. M. Hutchison,

J. H. PORTER,

J. P. PAINTER.

From June 1, 1929, to November 30, 1930:

MILTON R. STAHL, Chairman;

ALMON ING,

S. M. Hutchison,

J. H. PORTER,

J. FRED HULL.

LEGAL DEPARTMENT

This department consists of the General Counsel, Assistant Counsel and one stenographer.

The following shows the nature of the proceedings had in the various suits begun, ended or disposed of during the period beginning November 30, 1928, and ending November 30, 1930, inclusive, and which have been handled by this department.

- 1. State ex rel. City of St. Joseph vs. Public Service Commission. Water Rates: This case originated by writ of review sued out from the Cole County Circuit Court to review an order of the Commission establishing water rates in St. Joseph, Missouri. On trial in the Circuit Court, judgment entered for Commission. Appeal taken by City of St. Joseph to Supreme Court. Supreme Court in division reversed judgment of Circuit Court. Motion to transfer to court en banc filed and case transferred. Judgment of Supreme Court en banc affirmed the order of the Commission.
- 2. State ex rel. Farmers Elevator Company vs. Public Service Commission. Grade Crossing at Silex, Missouri, over the St. Louis & Hannibal Railroad: This case originated by writ of review sued out from the Circuit Court of Pike County. Argued and submitted, and judgment was entered reversing the order of the Commission. Motion for new trial sustained. On re-trial judgment sustaining order of Commission entered. Motion for new trial filed and overruled. No appeal taken.
- 3. Calhoun Farmers Mutual Telephone Company vs. Missouri Union Telephone Company and Southwestern Bell Telephone Company and Public Service Commission: Complaint by Calhoun Company against Missouri Union Telephone Company for refusal to permit physical connection dismissed by Commission for want of jurisdiction and writ of review sued out from the Henry County Circuit Court to review order of Commission. Judgment of Circuit Court affirmed order of Commission. Motion for new trial filed and overruled. No appeal taken.
- 4. State ex rel. Lohman and Farmers Mutual Telephone Company vs. Public Service Commission: This case originated by writ of review sued out from the Circuit Court of Cole County to review order of the Commission requiring that certain telephone service be rendered. On trial in Circuit Court, judgment affirming

order of Commission was entered. After appropriate motions, appeal taken to Supreme Court and judgment was entered reversing the Circuit Court.

- 5. State ex rel. Gus V. Brecht Butchers Supply Company vs. Public Service Commission: The Commission refused to require the building of a certain industrial track and the furnishing of particular freight service. Writ of review sued out from the Circuit Court of Cole County to review order of Commission. Certain large and extensive additions and betterments were undertaken by the railroad company involved, which, when completed, may make the trial of this case unnecessary. Case is now pending in Circuit Court.
- 6. State ex rel. E. W. Jenkins, Sec., vs. Public Service Commission. Firestone Tire and Rubber Case (Clearance Application): This case originated by writ of review sued out from the Circuit Court of Cole County, Missouri. On trial in Circuit Court, judgment was entered affirming order of Commission. After appropriate motions, appeal was taken to the Supreme Court. On trial in Supreme Court, judgment affirming the order of the Commission was entered.
- 7. State ex rel. E. W. Jenkins, Sec., vs. Public Service Commission. Pittsburgh Plate Glass Case (Clearance Application): This case originated by writ of review sued out from the Circuit Court of Cole County. On trial in the Circuit Court, judgment was entered affirming the order of the Commission. After appropriate motions, case was appealed to the Supreme Court, and on trial judgment was entered reversing the order of the Commission.
- 8. Capital City Water Compay vs. Public Service Commission. Injunction Proceedings in the United States District Court: This case originated by the filing of injunction proceedings to enjoin the Commission from enforcing its order fixing the water rates for Jefferson City. Before trial, case was dismissed by plaintiff.
- 9. State ex rel. Missouri Pacific Railroad Company vs. Public Service Commission. (Winner Road Viaduct Cases): This case originated by four of the parties suing out writs of review from the Circuit Court of Cole County. The four cases were consolidated. On trial in the Circuit Court, judgment affirming order of the Commission was entered. Separate appeals were taken to the Supreme Court, where the cases were consoli-

dated for argument, and judgment was rendered affirming the order of the Commission in part and reversing it in part.

- 10. Brooks et al. vs. Public Service Commission. (Certificate of Convenience and Necessity to Operate as a Motor Carrier): This case originated by writ of review sued out from the Circuit Court of Cole County, Missouri. On trial in the Circuit Court, judgment was entered affirming the order of the Commission. No appeal taken.
- 11. Rogers Iron Works, Inc., vs. Public Service Commission: This case involving water service originated by writ of review sued out from the Jasper County Circuit Court to review an order of the Commission. On trial in the Circuit Court, judgment was rendered affirming the order of the Commission. After appropriate motions, case was taken to the Supreme Court, tried and judgment was entered affirming order of the Commission.
- 12. State ex rel. Capital Stage Lines vs. Public Service Commission. (Certificate of convenience and necessity to operate as a motor carrier): This case originated by writ of review sued out from the Cole County Circuit Court. Case argued and submitted. Before judgment was rendered, relator dismissed.
- 13. State ex rel. Detroit-Chicago Motor Bus Co. vs. Public Service Commission: This case originated by writ of review sued out from the Circuit Court of Cole County to review order of the Commission denying a certificate of convenience and necessity. Trial in the Circuit Court resulted in reversal of the order of the Commission. After appropriate motions, case appealed to Supreme Court and judgment of Circuit Court reversed and order of Commission affirmed.
- 14. State ex rel. Gregory Bus Line vs. Public Service Commission. (Certificate of convenience and necessity to operate as a motor carrier): This case originated by writ of review sued out from the Circuit Court of Cole County. Case argued and submitted, and before judgment, case was dismissed by relator.
- 15. State ex rel. Obe Henson vs. Public Service Commission. (Certificate of convenience and necessity to operate as a motor carrier): This case originated by writ of review sued out from the Circuit Court of Cole County. On trial in Circuit Court, order of Commission set aside. After appropriate motions,

case taken to Supreme Court and judgment entered reversing the Circuit Court and remanding with directions.

- 16. State ex rel. E. W. Jenkins vs. Public Service Commission. Grennell Co., Inc. (Clearance Application): This case originated by writ of review sued out from the Circuit Court of Cole County. Case was argued and submitted and judgment entered affirming order of Commission. No appeal taken.
- 17. State ex rel. E. W. Jenkins vs. Public Service Commission, Frisco Icing Dock Case. (Clearance Application): This case originated by writ of review sued out from the Circuit Court of Cole County. Case argued and submitted and judgment entered affirming order of Commission. No appeal taken.
- 18. State ex rel. E. W. Jenkins vs. Public Service Commission. Chevrolet Motor Co. Case. (Clearance Application): This case originated by writ of review sued out from the Circuit Court of Cole County. Case argued and submitted. Judgment affirming order of Commission entered. No appeal taken.
- 19. State ex rel. E. W. Jenkins vs. Public Service Commission. Joplin Viaduct Case. (Clearance Application): This case originated by writ of review sued out from the Circuit Court of Cole County. Case argued and submitted and judgment entered affirming order of Commission. No appeal taken.
- 20. State ex rel. Missouri Pacific Railroad Company vs. Public Service Commission. Scofield Bus Case. (Certificate of convenience and necessity to operate as a motor carrier): This case originated by writ of review sued out from the Circuit Court of Cole County. Case argued and submitted and judgment entered reversing order of Commission. Motion for new trial filed. During pendency of motion, Missouri Pacific purchased Scofield Bus Company and case became moot. No further action taken.
- 21. State ex rel. Missouri Power and Light Co. vs. Public Service Commission. (Certificate of convenience and necessity to construct Ashland transmission line): This case originated by writ of review sued out from the Circuit Court of Cole County. After return to writ was filed, case was dismissed by stipulation, at relator's cost.
- 22. State ex rel. City of St. Louis vs. Public Service Commission. Eight Cent Street Car Fare Case: This case originated by writ of review sued out from the Circuit Court of Cole County. Case was tried, submitted and judgment entered affirming order

- of Commission. After appropriate motions, case was appealed to Supreme Court where judgment was entered affirming order of Commission.
- 23. State ex rel. Union Electric Light and Power Co. vs. Public Service Commission: This case originated by writ of review sued out from the Circuit Court of the City of St. Louis. It involves assumption of jurisdiction by the Commission over theft of current. Case argued and submitted and judgment entered affirming order of the Commission. After appropriate motions, case was appealed to Supreme Court and in division judgment was entered affirming the order of the Commission. Motion filed to transfer case to court en banc. Case transferred and now waiting decision by court en banc.
- 24. State ex rel. Chicago Great Western Railroad Co. vs. Public Service Commission. (Application to close station at Rea): This case originated by writ of review sued out from the Circuit Court of Cole County. Commission's return filed. Case now waiting trial.
- 25. State ex rel. Interstate Transit Lines vs. Public Service Commission. (Certificate of convenience and necessity to operate as a motor carrier): This case originated by writ of review sued out from the Cole County Circuit Court. Commission's return filed and case now waiting trial.
- 26. State ex rel. St Louis Public Service Co. vs. Public Service Commission. (Certificate of convenience and necessity to operate busses in City of St. Louis): This case originated by writ of review sued out of the Circuit Court of Cole County. Tried and submitted in Circuit Court and judgment entered affirming order of Commission. After appropriate motions, case appealed to Supreme Court. Heard en banc and now waiting decision of the Supreme Court.
- 27. State ex rel. Kansas City, Independence and Fairmount Stagelines Co. vs. Public Service Commission. (Certificate of convenience and necessity to operate as a motor carrier): This case originated by writ of review sued out from the Jackson County Circuit Court. Tried and submitted and judgment entered reversing the order of the Commission. Motion for new trial filed. Case pending on motion for new trial.
- 28. R. O. Kennedy et al. vs. St. Louis County Water Company. (Extension of water mains): This case originated by writ of review sued out from the Circuit Court of Cole County.

Case tried and judgment entered in the Circuit Court sustaining the order of Commission. Motion for new trial filed and overruled. Case appealed to the Supreme Court where it is now pending.

- 29. State ex rel. City of St. Louis vs. Public Service Commission. (Application of Utilities Fower & Light Corporation to acquire and hold more than ten per cent of the stock of the Laclede Gas Light Co.): This case originated by writ of review sued out from the Circuit Court of Cole County, Missouri. Tried in the Circuit Court and judgment entered affirming order of Commission. Motion for new trial filed and overruled. Case now pending on appeal in Supreme Court.
- 30. City of Columbia vs. Public Service Commission: This is an injunction proceeding against the Commission to prevent the Commission from fixing the rates for electric service in the City of Columbia. Case tried in the Circuit Court. Injunction issued. Motion for new trial filed and overruled. Case now pending on appeal in Supreme Court.
- 31. Public Service Commission vs. N. W. Williams: This case originated by suit filed at the direction of the Public Service Commission against Williams for failure to file annual report. Now pending in the Circuit Court of Cole County.
- 32. Public Service Commission vs. L. E. Webb: This case originated by suit filed at the direction of the Public Service Commission against Webb for failure to file annual report. Now pending in the Circuit Court of Cole County.
- 33. Public Service Commission vs C. W. Creed: This case originated by suit filed at the direction of the Public Service Commission against Creed for failure to file annual report. Now pending in the Circuit Court of Cole County.
- 34. Public Service Commission vs. Walter King: This case originated by suit filed at the direction of the Public Service Commission against King for failure to file annual report. Now pending in the Circuit Court of Cole County.
- 35. Public Service Commission vs. Alton Transportation Company: This suit originated by order of the Commission directing the filing of a petition for penalty for discontinuance of service without authority of the Commission. Case now pending in the Cole County Circuit Court.
- 36. State ex rel. Chicago Great Western Railroad Company vs. Public Service Commission. (Over-head crossing on

- U.S. Route No. 45): This case originated by writ of review sued out from the Circuit Court of Cole County, Missouri. Return filed. Case now pending.
- 37. State ex rel. Alton Transportation Company vs. Public Service Commission. (Certificate of convenience and necessity to operate as a motor carrier): This case originated by writ of review sued out from the Circuit Court of Cole County, Missouri. Tried by Circuit Court. Judgment entered setting aside order of Commission. Motion for new trial filed and overruled. Case appealed to Supreme Court where it is now pending.
- 38. State ex rel. Alton Transportation Company vs. Public Service Commission. (Certificate of convenience and necessity to operate as a motor carrier): This case originated by writ of review sued out from the Circuit Court of Cole County. Case tried and judgment of Circuit Court entered setting aside order of Commission. Motion for new trial filed and overruled. Case appealed to Supreme Court. where it is now pending.
- 39. Jackson County, Missouri vs. Public Service Commission, Missouri Pacific Railroad Company and Chicago, Rock Island and Pacific Railroad Company: This case originated by writ of review sued out from the Circuit Court of Jackson County, Missouri. Return filed. Case now pending in the Circuit Court of Jackson County.
- 40. The Alton Transportation Company vs. Public Service Commission. (Certificate of convenience and necessity to operate as a motor carrier): This case originated by writ of review sued out from the Circuit Court of Cole County. Case tried and judgment entered setting aside order of Commission. Motion for new trial filed and overruled. Case now waiting trial in the Supreme Court.
- 41. Public Service Commission vs. Kansas City Power & Light Company: This case originated by filing an injunction proceeding against the Kansas City Power & Light Company to prevent their furnishing electric current over a line not authorized by the order of the Public Service Commission. Case tried in the Circuit Court of Cole County. Judgment entered for Commission. Case appealed to Supreme Court. On trial in the Supreme Court, injunction made permanent.
- 42. State ex rel. Burlington Transportation Company and Chicago, Burlington & Quincy Railroad Company vs. Public Service Commission. (Certificate of convenience and necessity

to operate as motor carrier): This case originated by writ of review sued out from the Circuit Court of Cole County, Missouri. Return filed. Case tried in the Circuit Court and judgment entered setting aside order of the Commission. Motion for new trial filed.

- 43. State ex rel. City of St. Louis vs. Public Service Commission. (Dial Case): This case originated by writ of review sued out from the Circuit Court of Cole County. Case tried and judgment entered affirming order of Commission. Motion for new trial filed and overruled. Case appealed to Supreme Court. Case briefed, argued and submitted and now waiting decision of the court.
- 44. Chicago & Alton Railroad Company vs. Public Service Commission. (Station closing case at Guthrie): This case originated by injunction suit filed by the railroad company in the United States District Court. Answer filed and case waiting trial.
- 45. State ex rel. St. Louis County Water Company vs. Public Service Commission: This case involving a reduction in water rates originated by writ of review sued out from the Circuit Court of Cole County. Return filed and before trial, preliminary writ of prohibition issued by Supreme Court in the case of University City vs. H. J. Westhues. The water case is now waiting disposition of the prohibition case.
- 46. State ex rel. City of St. Louis vs. Public Service Commission. (Application by City Utilities Company to acquire more than ten per cent. of the stock of St. Louis Public Service Company): This case originated by writ of review sued out from the Circuit Court of Cole County. Tried in the Circuit Court. Judgment entered affirming order of Commission. After motion for new trial was filed and overruled, appeal was taken to the Supreme Court where case is now pending.
- 47. State ex rel. H. S. Priest vs. Public Service Commission. (Application by City Utilities Company to acquire more than ten per cent. of the stock of St. Louis Public Service Co.): This case originated by writ of review sued out from the Circuit Court of Cole County. Tried in the Circuit Court. Judgment entered affirming order of Commission. After motion for new trial was filed and overruled, appeal was taken to the Supreme Court where case is now pending.

- 48. State ex rel. Missouri Pacific Railroad Company and Missouri Pacific Transportation Company vs. Public Service Commission. (Certificate of convenience and necessity to operate as a motor carrier—To take off trains): This case originated by writ of review sued out from the Circuit Court of Cole County. Case tried in Circuit Court and judgment entered setting aside order of Commission. After appropriate motions, case was appealed to the Supreme Court where it was briefed, argued and submitted and is now waiting decision of the court.
- 49. State ex rel. "The" Laundry Company and The Overland Laundry Company vs. Public Service Commission. (Water rate for laundries): This case originated by writ of review sued out from the Circuit Court of Cole County. Case tried in the Circuit Court. Judgment entered setting aside order of Commission. After appropriate motions, case was appealed to Supreme Court where case was briefed, argued and submitted and is now waiting decision of the court.
- 50. State ex rel. Atlantic-Pacific Stages vs. Public Service Commission. (Certificate of convenience and necessity to operate as a motor carrier): This case originated by writ of review sued out from the Circuit Court of Cole County, Missouri. Case tried. Judgment of Circuit Court entered reversing order of Commission. Motion for new trial filed and overruled. Appeal not perfected because of injunction issued by United States District Court.
- 51. State ex rel. Public Service Commission vs. Western Light & Power Corporation of Missouri: This case originated by order of the Commission to the General Counsel to file suit for penalty against the Western Light & Power Corporation for charging a rate other than the rate on file. Case tried and submitted in the Circuit Court. Judgment entered for \$1,000.00 payable to the State School Fund of Missouri. Judgment paid and record satisfied.
- 52. State ex rel. Kansas City Gas Company vs. Public Service Commission. (Certificate of convenience and necessity for Industrial Gas Company): This case originated by writ of review sued out from the Circuit Court of Cole County, Missouri. Case tried in the Circuit Court and judgment entered setting aside order of Commission. By direction of the Commission and for lack of funds, the case was not appealed.

- 5. State ex rel. M. S. Baird et al. vs. Public Service Commission. De Iuxe Bus Case. (Revocation of certificate of convenience and necessity): This case originated by writ of review sued out from the Circuit Court of the City of St. Louis. Return filed. Case set for hearing, but dismissed by relator before trial.
- 54. State ex rel. M. S. Baird et al. vs. Public Service Commission and St. Louis Public Service Company. (Certificate of convenience and necessity issued to St. Louis Public Service Company to operate as a motor carrier): This case originated by writ of review sued out from the Cole County Circuit Court. Return filed and before trial, case was dismissed by relator.
- ~ 55. State ex rel. Kansas City, Missouri, vs. Public Service Commission. (Street car fare in Kansas City, Mo.): This case originated by writ of review sued out from the Circuit Court of Cole County. Return filed. Case waiting trial in the Circuit Court.
- 56. State ex rel. T.H. Dilse vs. Public Service Commission. (Telephone service between Eldon and Versailles): This case originated by writ of review sued out from the Cole County Circuit Court. Case now pending in the Circuit Court.
- 57. Cooperative Hearing—P. S. C. Nos. 6202 and 6128 with I. C. C. Docket No. 21772: This case involved a cooperative hearing of the Missouri Commission and the Interstate Commerce Commission, originating by petition of the Missouri Commission, and it involved all class and commodity rates in southern Missouri. Hearing was had. Case argued and submitted and now pending decision.
- 58. State ex. rel. City of St. Louis vs. Public Service Commission. (Gas rates in the City of St. Louis): This case originated by writ of review sued out from the Circuit Court of Cole County. Case tried and judgment of Circuit Court entered affirming order of Commission. After appropriate motions, case appealed to the Supreme Court where it was briefed, argued and submitted and is now awaiting decision of the court.

ENGINEERING DEPARTMENT

The period covered by this report has been one of unusual activity and accomplishment for the Engineering Department of the Commission. This has been made possible by the appropriation allowing the Commission to collect fees to the amount of \$500,000.

When said appropriation was approved on June 20, 1929, this department consisted of one chief engineer, six assistant engineers and one stenographer. The department was immediately built up to an organization of approximately seventy engineers, clerks and stenographers under the supervision of the Chief Engineer. One assistant engineer and one clerk, who also acts as stenographer, are assigned to the Chief Engineer's office in Jefferson City, and all others are engaged directly in investigations and appraisals of utility properties throughout the State.

The duties of the Engineering Department consist of:

- (a) Appraisal of all properties over which the Commission has jurisdiction.
- (b) All matters relating to investigation of accidents on steam and electric railways.
- (c) All matters relating to protection, alteration and elimination of grade crossings.
- (d) Inspection of steam and electric railway properties.
- (e) Investigations to determine necessity and safety of switch and sidetrack connections.
- (f) All matters relating to steam and electric railway signal systems and interlocking plants.
- (g) All matters relating to steam and electric railway clearances.
- (h) All matters relating to street railway traffic studies and services.
- (i) Investigations relative to applications for certificates of convenience and necessity, filed by steam and electric railways.
 - (j) All drainage investigations.
- (k) All investigations relative to filtration of water supplies, intakes, etc.

- (1) Introduction of testimony and assisting in examination of witnesses in engineering matters.
- (m) Assisting in preparation of reports involving engineering problems.

APPRAISAL OF PROPERTY OF PUBLIC UTILITIES

During the years 1929 and 1930, the Engineering Department has confined its appraisal activities, in so far as possible, to properties upon which the Commission had very little accurate information due to their rapid growth and our inadequate appraisal organization in the past. The total fair value of the properties appraised during the period is approximately sixty-five millions of dollars (\$65,000,000), and includes the following:

Missouri Power & Light Company—Jefferson City Gas Dept.

Unionville Telephone Exchange

Palmyra Telephone Exchange

Brunswick Telephone Exchange

Springfield Water Company

Osage Valley Telephone Company—Eight Exchanges

Kansas City Public Service Company (Street railway and bus property in Kansas City, Missouri, Kansas and Jackson County)

Middle States Utilities Company—Five Exchanges

Empire District Electric Company and subsidiaries—Including Joplin and 70 other cities and towns in Missouri, and all property in Oklahoma and Kansas.

East Missouri Power Company—Troy and 33 other cities and towns.

In addition to the above appraisals, the Engineering Department made a detailed inventory and appraisal of the Industries Department of the State Penitentiary, and is now making appraisals of five electrical properties that will affect 225 communities. These are as follows:

Missouri Power & Light Company Missouri Southern Public Service Company Missouri General Utilities Company Missouri Edison Company Missouri Electric Power Company

A large number of appraisals made by Company or consulting engineers were checked and verified by the Department for rate and financial purposes.

INVESTIGATION OF ACCIDENTS ON STEAM AND ELECTRIC RAILWAYS

All serious accidents either to passengers, employees, or equipment are reported to the Commission by telegraph, and all accidents serious enough to come to the attention of the Companies are reported each month on special forms provided by the Commission.

A careful investigation is made of all grade crossing accidents and includes precise surveys and photographs. The purpose of these investigations is to determine the cause, and ascertain if protective devices such as signals, flagmen, etc., are necessary.

In connection with the Commission's desire to cooperate in grade crossing matters with the railroad companies operating in the State, the Department has supervised the survey of all grade crossings in the State. This survey was completed during the past year and shows all physical characteristics of each crossing, such as grade, pavement, number of tracks, distances a train can be seen from various points along the road or street, the train and vehicular movements, etc. These surveys are being classified and it is thought that a large number of grade crossings may be eliminated as a result of this work.

During the period December 1, 1928, to November 30, 1930, investigations were made, plans approved and recommendations made leading to the following changes in the grade crossing situation:

	1929	1930	Total
New grade crossings established	40	83	123
New tracks constructed across existing grade crossings.	3		3
Viaducts constructed over tracks	11	35	46
New viaduets replacing old viaduets	4	3	7
Subways constructed under tracks	9	36	45
Grade crossings eliminated by viaduets or subways	4	9	13
Grade crossings eliminated by changes in roads	13	15	28
Grade crossings provided with special signal protection.	15	17	32

During the period November 1, 1928, to October 31, 1930, all accidents upon steam and electric railways were compiled and disclose the following:

ALL ACCIDENTS, NOVEMBER 1, 1928, TO DECEMBER 31, 1929

	Stea	Steam.		E ectric.		Total.	
	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	
Passengers	5 44	145 823	2 2	1,843 67	7	1,988 890	
Trespassers Non-trespassers	107 68	74	51	1,168		1,561	
Totals	224	1,361	55	3,078	279	4,439	

ALL ACCIDENTS FIRST TEN MONTHS YEAR 1930

	Steam.		Electric.		Total.	
	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.
Passengers	5	115 457	1	809 42	6 25	924
Trespassers	84 59	90	27	Ł I	170	
Totals	170	914	31	1,484	201	2,398

GRADE CROSSING ACCIDENTS-STEAM RAILWAYS—NOVEMBER 1, 1928, TO OCTOBER 31, 1930

	Killed.		Injured,		Total.	
	11-1-28 12-31-29	1-1-30 10-31-30	11-1-28 12-31-29		Killed.	Injured.
Train striking vehicle Vehicle striking	48	31	115	94	79	209
train	5	5	45	28	10	73
Totals	53	36	160	122	89	282

INVESTIGATION OF SIGNAL SYSTEMS AND INTER-LOCKING PLANTS

Plans were approved for the installation and changes in interlocking and signal systems of steam railroad crossings at St. Louis, Kansas City, St. Joseph, Machens, Lock Springs, Asbury and Gulfton.

Investigations were made of adequacy of service rendered by steam railways, and assistance given by the Department at a large number of hearings relative to the regulation of train service, requests for the discontinuance of station agents, etc.

STEAM RAILWAY CLEARANCES

Investigations were made and assistance given by the Department relative to twenty-three requests for permission to construct tracks and structures with clearances less than prescribed by law and Commission's General Order.

GENERAL

Members of the Engineering Department attended and participated in all hearings and conferences relating to duties of the Department, and assisted the Commission in the preparation of over three hundred reports and orders.

Special investigations and examinations were made of a number of properties in connection with complaints, financing, changes in the manner of operation, etc.

DEPARTMENT OF STATISTICS AND ACCOUNTS PERSONNEL AND DUTIES

The personnel of this department consists of one chief accountant, four expert accountants, seven assistant accountants and one clerk. Its duties and activities are as follows:

- (a) Auditing books and records of steam railroads, electric railways, express, telephone, gas, electric, water, heating and motor bus companies in order to ascertain investment, original cost, capitalization, accumulations in depreciation reserves, income, expenses, operating statistics and rates of return, to be used in valuation, capitalization, and rate-making cases.
- (b) Testifying before the Commission, and courts where necessary, with respect to audits and statistical data.
- (c) Analyzing accounting and statistical exhibits and evidence presented by utilities in valuation, capitalization and rate making cases.
- (d) Examining and analyzing quarterly, semi-annual and annual exhibits of operating results of companies operating under temporary rates or fares, in order to determine whether such rates should be further extended or terminated.
- (e) Preparing, mailing, receiving and filing annual reports of various utilities operating in the State.
- (f) Drafting accounting systems and forms of annual reports for utilities.
- (g) Advising verbally and by correspondence with the various utilities in regard to matters pertaining to accounts and statistics.
- (h) Checking the accuracy of the annual reports filed by the utilities, and securing corrections of inaccuracies and omissions.
- (i) Analyzing annual reports of utilities in order to determine the rates of return being earned upon the book values of utility property.
- (j) Examining and recording semi-annual reports of sales of bonds and stocks previously authorized by the Commission, and dispositions of proceeds therefrom.
- (k) Analyzing all applications for the issuance of securities and preparing reports and orders in security cases.

AUDITS DURING PERIOD

The following audits have been completed by this department during the period between December 1, 1928 and November 30, 1930:

- 1. Union Electric Light and Power Company, St. Louis and vicinity.
- 2. Cupples Station Light, Heat and Power Company, St. Louis.
- 3. St. Charles Electric Light and Power Company, St. Charles.
- 4. Capital City Water Company, Jefferson City.
- 5. Missouri State Prison, Industries Department, Jefferson City.
- 6. Central West Missouri Telephone Company, Brunswick Exchange.
- 7. Springfield City Water Company, Springfield.
- 8. Missouri Hydro-Electric Power Company, Kansas City.
- 9. Middle States Utilities Company, Unionville Telephone Exchange.
- 10. Middle States Utilities Company, Cainsville Telephone Exchange.
- 11. Middle States Utilities Company, Gilman City Telephone Exchange.
- 12. Middle States Utilities Company, Wayland Telephone Exchange.
- 13. Middle States Utilities Company, Mercer Telephone Exchange.
- 14. Middle States Utilities Company, Lawson Telephone Exchange.
- 15. Missouri Power and Light Company, Jefferson City Gas Property.
- 16. Pleasant Hill Gas Company, Pleasant Hill.
- 17. Kansas City Public Service Company, Kansas City.
- 18. East Missouri Power Company, Louisiana.
- Missouri Utilities Company, Southeastern Division, Cape Girardeau and Vicinity.

The audit of Union Electric Light and Power Company involved a complete audit and verification of property investment accounts, profit and loss and surplus accounts, and depreciation and other reserves; also separations and allocations of the ac-

counts as between St. Louis and other communities served. It also involved separations of the accounts as between the electric department and the steam heating department, and included complete analyses and studies of power purchase contracts. This was the largest audit ever completed by this department.

Reports have been prepared for each of these audits and except with respect to pending cases and the audit of Missouri Power and Light Company (Jefferson City Gas property) all audits have been presented in evidence and testified to at hearings before the Commission. The audit of Missouri Power and Light Company in conjunction with an appraisal of its property made by the engineering department resulted in a reduction of gas rates in Jefferson City before hearings were held.

In addition, the following audits were in progress on November 30, 1930:

- 1. Empire District Electric Company, Joplin and vicinity.
- 2. Missouri Electric Power Company, Mountain Grove and vicinity.
- 3. Missouri General Utilities Company, Ste. Genevieve and vicinity.
- 4. Missouri Southern Public Service Company, Cassville and vicinity.

The properties audited by this department during this biennium and those in progress, represent an investment of more than \$115,000,000.00.

ACCOUNTING SYSTEMS

The uniform accounting systems heretofore prescribed by this Commission for electric, water, gas, heating and telephone utilities have been in use for more than fifteen years, and due to the growth of the utilities and to the numerous consolidations of small properties it has been found that these accounting systems are inadequate for present needs. This department has therefore undertaken a revision of these systems, and it is expected that tentative revised classifications of accounts will be submitted to the utilities for suggestions and criticisms during the early part of 1931. The revision of such classifications will also necessitate a revision of the forms of annual reports made to the Commission by these utilities.

ANALYSIS OF ANNUAL REPORTS

A comprehensive check and verification of the annual reports filed with the Commission by the various utilities has been made by this department which, after much correspondence and many conferences with the utilities' representatives, has resulted in much improvement in the accounting practices of the utilities. These analyses of the annual reports have also resulted in a number of reduced rate schedules being filed.

This department also has installed accounting systems for two telephone utilities during this period.

STOCKS, BONDS AND NOTES AUTHORIZED

Utilities organized, incorporated or existing under the laws of Missouri may issue stocks, bonds, notes and other evidences of indebtedness payable at periods of more than twelve months after the date thereof only after securing an order of the Commission authorizing such issue. The order specifies the amount of the issues and the disposition of the proceeds, and contains the terms and provisions under which the issue may be made.

The regulation of securities issued by utilities is one of the important functions of the Commission, and the conditions surrounding the issues are carefully investigated in each case to determine whether the property and earnings will support the securities proposed to be issued. This department in each case reports its recommendation to the Commission and in many cases assists in preparing the report and order authorizing or denying the application.

The Commission requires semi-annual reports from utilities showing the sales of all securities, which reports are checked by this department in order to determine whether all provisions of the orders are complied with.

The securities authorized by the Commission during the period covered by this report are detailed in the following table:

TABLE SHOWING ALL AUTHORIZATIONS TO ISSUE STOCKS, BONDS, AND NOTES, UNDER THE PUBLIC SERVICE COMMISSION LAW, FROM DECEMBER 1, 1928, TO NOVEMBER 30, 1930.

Case No.	Name of Company.	Kind of security.	Amount allowed.	Date of permit.
6146 6185 6178 6181 6056 6206 6207 6228 6238 5688 6289 6205 4717 6321 6242 5603 6389 6370 6401	Missouri Gas and Electric Service Company Missouri General Utilities Company Southwestern Bell Telephone Company Consumers Public Service Company Alton Light and Power Company East Missouri Power Company Missouri Public Service Company Missouri Edison Company Sedalia Water Company Central West Missouri Telephone Company Liberal Light and Power Company North Central Telephone Company Independence Water Company Kansas City Power and Light Company United Telephone Company Midwest Telephone Company Ellington Telephone Company Ozark Telephone Company Southeast Missouri Telephone Company	Bonds Non-par stock. Bonds Stock Stock Bonds Non-par stock. Bonds Non-par stock. Stock Stock Bonds Stock Non-par stock. Bonds Stock Non-par stock. Bonds Stock Non-par stock. Bonds Stock	$\begin{bmatrix} 600,000.00 \\ 2,204,000.00 \end{bmatrix}$	12-14-1928 12-12-1928 12-12-1928 12-13-1928 1-11-1929 1-12-1929 1-23-1929 2-2-1929 1-31-1929 2-26-1929 3-8-1929 4-10-1929 3-25-1929 4-20-1929 5-4-1929 5-10-1929 5-29-1920
6345 6350	I m 1 1 Company	Stock	503,000.00	6-12-1929

6458	Missouri Gas and Electric Service Company	Non-par stock	2,691 shares	6 - 26 - 1929
6498	Springfield City Water Company	Bonds	\$763,500.00	7 - 11 - 1929
6410	Missouri Electric Power Company	Bonds	1,600,000.00	7 - 3 - 1929
0110	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	Stock	3,000.00	
		Non-par stock	10,000 shares	
6490	Home Telephone Company of Harrison County	Stock	10,000.00	7 - 31 - 1929
6525	Capital City Telephone Company	Stock	250,000.00	8-2-1929
6530	Joplin-Pittsburg Railroad Company	Bonds	200,000.00	8-22-1929
		Stock,	200,000.00	
6536	St. Louis County Gas Company	Stock	500,000.00	9-7-1929
6853	Missouri Public Service Company	Non-par stock	12,500 shares	10-26-1929
6733	Laclede Gas Light Company	Bonds	5,500,000.00	11-23-1929
6645	Pleasant Hill Gas Company	Stock	46,600.00	11 - 14 - 1929
6682	Missouri Power and Light Company	Non-par stock,	20,000 shares	11 - 4 - 1929
6750	Interstate Gas Company	Non-par stock	500 shares	12 - 3 - 1929
6783	Missouri Public Service Company	Bonds	500,000.00	12-30-1929
-6752	Southwestern Bell Telephone Company	Stock	15,000,000.00	12-16-1929
6770	Missouri Gas and Electric Service Company	Bonds	173,000.00	12-23-1929
		Non-par stock	286 shares	
6791	Union Electric Light and Power Company	Bonds	15,000,000.00	12-23-1929
6743	Consumers Public Service Company	Stock	50,000.00	12 - 17 - 1929
6859	Springfield City Water Company	Bonds,	98,000.00	2-7-1930
6881	Public Utilities Engineering Company	Non-par stock	500 shares	2-27-1930
6868	Kansas City Power and Light Company	Bonds	7,000,000.00	2-24-1930
	$ar{ar{ar{ar{ar{ar{ar{ar{ar{ar{$	Non-par stock	12,000 shares	
6882	Missouri Edison Company	Non-par stock	1,000 shares	4- 7-1930
6830	United Telephone Company,	Bonds	453,100.00	
	<u>{</u>	Stock	100,000.00	4-7-1930
	Į į	Non-par stock	4,722 shares	
6991	Pickwick Greyhound Lines, Inc	Notes	500,000.00	5- 8-1930
6830	United Telephone Company	Bonds	74,800.00	5-23-1930
i	Į.	Non-par stock	1,082 shares	

\$36,466,400.00 522,170.00 38,027,700.00 420,270 shares

TABLE SHOWING ALL AUTHORIZATIONS TO ISSUE STOCKS, BONDS, AND NOTES, UNDER THE PUBLIC SERVICE COMMISSION LAW, FROM DECEMBER 1, 1928, TO NOVEMBER 30, 1930—Continued.

Case No.	Name of Company.	Kind of security.	Amount allowed.	Date of permit.
6458 7019	Missouri Gas and Electric Service Company	Non-par stock Bonds	101 shares \$126,500.00	6-13-1930 7-16-1930
7115	Birch Tree Telephone Company	Note	1,000.00	7-17-1930
7097	Pleasanton Telephone Company	Stock	7,000.00	7181930 7231930
$7092 \ 7167$	Liberty Gas and Service Company	NoteBondsNon-par stock	19,170.00 300,000.00 10,000 shares	8-21-1930
7168	East Missouri Power Company	Bonds	150,000.00 150,000.00	8-25-1930 $8-25-1930$
7169	Missouri Edison Company	Stock	575,400.00	9-19-1930
$7180 \mid 7232 \mid$	Missouri Gas and Electric Service Company	Non-par stock	1,878 shares	9-18-1930
7239	Union Electric Light and Power Company	Non-par stock	300,000 shares	9-23-1930
7204	Purdy Telephone Company	l _ u	2,000.00	9-16-1930
7171	Western Telephone Corporation of Missouri	Bonds	194,000.00	10-28-1930

Total Stock, no par value.....

THE ELECTRIC, WATER, GAS AND STEAM HEATING DEPARTMENT

The work of this Department is at present carried on by its Chief, one Clerk, and one Stenographer.

The duties of this Department are as follows:

The keeping of an accurate official record of the rates charged by all corporations and municipalities furnishing gas, electric, steam heating, and water service in this State that come under the jurisdiction of the Commission under the provisions of the Public Service Commission Law.

Attention to all correspondence and verbal requests for information on matters pertaining to the rates charged and service furnished by gas, electric, steam heating, and water utilities.

Adjustment of correspondence complaints involving gas, electric, steam heating or water service.

The filing of the schedules of rates, rules and regulations of gas, electric, steam heating, and water utilities, and the keeping of a record showing the increase or decrease in the annual gross revenue that will result from the application of the new schedules.

General inspection and test of service meters.

General supervision of the quality of equipment of gas, electric, steam heating and water utilities in so far as the public interest, public health and safety of the public and employees are concerned.

Analysis, in conjunction with the Accounting Department, of operating reports as required by the Commission's orders allowing rates, from which analyses subsequent orders are made relative to the continuing or changing of such rates.

To attend hearings, offer testimony and make investigations when necessary, in matters before the Commission involving permits for electric transmission lines, inductive interference controversies and transfers of utilities, the filing of rate schedules, and other formal cases before the Commission relating to standards, adequacy and extensions of utility service, and the charges for such service.

From December 1, 1928, to November 30, 1930, inclusive, this department attended and took part in 178 hearings before the Commission.

During the above mentioned period 4,292 letters and 389 reports and orders were written. When writing a majority of the letters it was necessary first, to collect information and data, and make copies of enclosures to be sent with the letters. 1,983 schedules of rates, rules and regulations were filed and 24 special authority orders authorizing new rates and/or rules were issued.

Reductions in annual gross revenue resulting from the filing of the new schedules are as shown in the table below:

	January 1, 1929, to December 31, 1929, inclusive.	January 1, 1930, to November 30, 1930, inclusive.
Electric	294,062.78 104,000.00	$330,518.60 \\ 5,309.25$

During the year 1929 the Laclede Gas Light Company filed with the Commission new rates for gas service in St. Louis which increased its annual gross revenue approximately \$600,000, and during the year 1930 the Springfield City Water Company filed new rates for water service which increased its annual gross revenue approximately \$70,095. After formal investigations and hearings, which showed that the increased rates were necessary for these utilities to earn a fair return upon the fair value of the property used in rendering the service, the Commission authorized the filing of the new rates.

During the past two years the department has also worked up consolidated schedules for various utilities for the purpose of lessening the work of the utilities when preparing new schedules for each city and town served, and also for the purpose of lessening the work of this Department when new rates are filed.

The question of rural electrification is growing in importance daily and the head of the department has been attempting, by working in conjunction with the various utilities, to make up rural extension rules that will not be prohibitive but will induce the farmer to take electric service and will at the same time provide revenue sufficient to justify the utility to make the extension.

The department has also given a large amount of time and assistance to other departments of the State on engineering problems and undertakings. Assistance has been given on the examination and analysis of proposals for furnishing coal, boilers, engines, water treating systems, ice making machines, steam heating and electric service, electric generating machinery, and numerous other smaller matters. In this work alone the department can point to savings to the State that amount conservatively to several thousands of dollars more than the entire expense of the department.

Due to the use of the radio new problems have come to this department because of electrical interference. The handling of these problems has called for a large amount of work that did not exist prior to the development of this phase of the electrical art. It has grown to enormous proportions during the last two to three years due to the almost universal use of the radio. Letters are received from all parts of the state asking for assistance in efforts to eliminate such interference. It might be added that although this commission has no jurisdiction over radios, the complainants in most cases have been satisfied through our efforts.

For the purpose of showing how the rates for electric service have changed since the Public Service Commission law was passed in 1913 tables and graphs are hereto attached. Due to the many and varied forms in which the utilities and municipalities have filed their schedules it has been necessary to bring all the schedules to a common basis by the use of certain quantities of electrical energy taken by residence, business lighting, and power customers.

In applying the residence schedules to that class of service a customer whose residence has five rooms, and whose need for current amounts to a total load of 500 watts, or approximately that required to operate an electric iron, has been taken as the average consumer. These conditions are necessary because some utilities fix the charges on the number of active rooms contained in the residence, some on the total number of rooms, some on a fixed service charge plus a rate for the energy used, some on the ordinary block rate form of schedule, and various other factors.

Also, to present the rates charged for residence service more clearly and in a form that will be more valuable to the consumers of electric current the schedules have been grouped in accordance with the population of the town to which they apply. This is necessary because the average consumer in the smallest towns may be near 15 kilowatt hours per month whereas in the largest cities it is near 50 kilowatt hours. Another condition has been taken into account. Around 1913 a large part of the current in the home was used for lighting service alone. Later the electric iron played an important part in the total current used. Then rapidly came other appliances, such as toasters, percolators, ranges, wasfile irons, heating appliances, washing machines, motors for operating oil burning furnaces, fans, electric refrigerating machines, all motor driven or power consuming equipment, and now the radio. With all this increase in the use of electrical energy, that used for lighting service only has decreased in per cent very greatly.

In order to present fully the rates charged in the various cities it has been necessary to add to the tables and curves attached for residence larger blocks of energy than was necessary for the earlier part of the period covered. To illustrate, the rate charged per kilowatt hour is shown if the customer used 15 kilowatt hours, 30 kilowatt hours and 50 kilowatt hours for the years 1913 to 1929, inclusive. Because of the fact that many customers in residences are using as high as 1000 kilowatt hours per month the table for 1930 has been extended to show the rate per kilowatt hour if the customer uses 100 kilowatt hours, 300 kilowatt hours, and 500 kilowatt hours per month.

With this information at hand any city official or consumer of electric current in Missouri can determine at once what the average cost of electric current is in any town of the population falling within the sizes shown.

In order that these tables and curves may be useful for all future time it has been so arranged that like averages may be made for future years and attached to the present tables and curves, thus avoiding a reprint each year.

Similar tables and curves have been prepared and attached applying to business lighting and power. These tables and curves do not show as completely the relative rates charged for service as the tables and curves above for residence service. This is difficult to show, because a business house in a small town may use twenty 50-watt lamps and a relatively large house in our largest cities use several thousand. There is no common ground for comparing them. Likewise a 10 horse power motor may be large for our small towns whereas the power load for some cus-

tomers in the cities may be two or three thousand horse power. No effort has been made to compare their rates. A load of one kilowatt has been taken as the demand for business lighting customers and a load of 15 horse power or 10 kilowatts for power customers.

The schedules used are those in effect June 1 of each year.

AVERAGE RATE IN CENTS PER KWH FOR RESIDENCE LIGHTING.

		- · <u>· · · · · · · · · · · · · · · · · ·</u>																	
Popula- tion of towns.	Total No. of KWH used per month.	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930
0 10 500	15 KWH 30 KWH 50 KWH 100 KWH 300 KWH 500 KWH		14.0	13.6 13.0	13.8 13.1	13.5 13.0	14.5	14.1 13.3	15.0	15.6 15.0	15.5 15.0	15.2	15.1 14.7	14.8	14.5	13.9	12.8	12.3	12.6 11.7 10.3 08.5 07.0 06.6
500 to 1,000	15 KWH 30 KWH 50 KWH 100 KWH 300 KWH 500 KWH	1	13.6 13.4	13.6	13.5 13.1	13.5 12.9	13.8 13.3	14.1 13.5	14.8	15.2	14.9	14.7 14.1	14.6	14.5 13.8	14.1 13.4	13.4 12.8	12.8	12.4 11.6	11.8
1,000 to 1,500	.15 KWH 30 KWH 50 KWH 100 KWH 300 KWH 500 KWH		13,6	13.0	13,0	12.6 12.1	13.0 12.3	13.3 12.6	14.1 13.5	14.4	14.2	14,2 13.6	14.0	13.7	13.4 12.6	13.0 12.0	12,0	11.4	11.0
1,500 to 2,500	15 KWH 30 KWH 50 KWH 100 KWH 300 KWH	12,0	12.1 11.7	12.1 11.0	11.9 11.5	12.0 11.5	12.6 12.0	12.7 12.1	13.4	13,3	13.5	13.3 12.8	13.2 12.7	13.2	13.0 12.3	12.9 12.1	12.2	11.7	11.7 11.4 10.7 09.1 07.5 07.2
2,500 to 3,500	15 KWH 30 KWII 50 KWH 100 KWH	11.4	11.4	11.3	11.0	11.0	11.9	12.0	13.1	13.7	13,3	13.0	12,8	12.2	11.3	11.1	10.8	10.0	09.4

	300 KWH				<i></i> .														$05.7 \\ 05.3$
	500 KWH			• • • • • •															00.3
3,500	15 KWH	11.4	11.1	11.0	10.5	10.3	11.4	11.3	12.0	12.7	12.4	11.9	11.7	11.4	11.4	11.0	10.7	10.5	10.1
5,500 to	30 KWH	11.3			10.3		1				l .		11.5	1	11.0		10.2	10.1	09.5
5,000	50 KWH	11.1					1								,-	, _		09.3	08.7
5,000	100 KWH		10.0	10. 1			10,0	10,0											06.9
	300 KWH															<i></i> .			05.3
	500 KWH														.·	<i>.</i>			05.0
	000 11 11 11	, , , , ,					' ' '		1		1								
5.000	15 KWH	11.4	10.8	11.0	10.8	10.1	10.5	10.8	11.5	11.5	11.4	11,3	11.2	11.1	10.8	10.8	09.5	09,2	09.0
to	30 KWH	10.5	10.0	09.9	09.7	09.4	09.7	10.1	10.6	11.2	10.7	10.6	10.6	10.5	10.2	10.2	09.3	08.8	08.6
10,000	50 KWH	10.2	09.3	09.0	08.8	08.7	08.8	09.1	09.6	10.0	10.0	09.6	09.6	09.6	09.5	09.4	08.7	07.7	07.7
	100 KWH			<i></i>					,				,						06.1
	300 KWH				 .			<i></i> .											04.7
	500 KWH																		04.4
							ļ						1						
10,000	15 KWH	09.8																08.5	08.1
to	30 KWH	09.7				1	i .	ı	ı									08.3	07.8
20,000	50 KWH	09.5	08.7	08.6	08.4	08.4	08.5	08.6	08.9	09.3	09.1	09.1	09.1	08.9	08.8	08.7	08.8	07.5	07.3
İ	100 KWH																		06.0
	300 KWH	,			.									,			[05.0
	500 KWH	<i></i>			,														04.7
. .							00.0		00.0		00.0	00.0			00.0	00.0	00.0	اه مم	nn a
20,000	15 KWH	09.9		09.0											09.0 08.9		08.8	08.8	$09.6 \\ 07.9$
to	30 K W H	09.8										1			08.6		08.8	08.1	$07.9 \\ 07.3$
50,000	50 KWH 100 KWH	09.2	07.4	08.3	07.6	08.2	08.1	08.6	08.0	08.0	08.6	08.6	05.0	08.0	08.6	08.6	98.1	08.1	06.3
	300 KWH			*															05.6
	500 KWH									· · · · · ·								• • • • • •	ບລ.ບ 05.4
	SUU K W II																		00.4
50,000	15 KWH	09.7	09.7	09.7	08.5	07.6	07.9	08.3	08.3	08.5	08.5	08.1	07.8	07.8	07.8	07.7	07.7	07.7	07.7
and	30 KWH	08.3		08.3	06.8				07.2						07.2		07.0	07.0	06.6
Over	50 KWH	07.8	, -		05.9				06.3						06.2		06.2	06.2	05.3
5,61	100 KWH	51.0	. 57.0										50.2				00.2		04.0
	300 KWH										[03.0
	500 KWH						l				J		l	1					02.8

AVERAGE RATE II	CENTS	PER	KWH	FOR	BUSINESS	LIGHTING.
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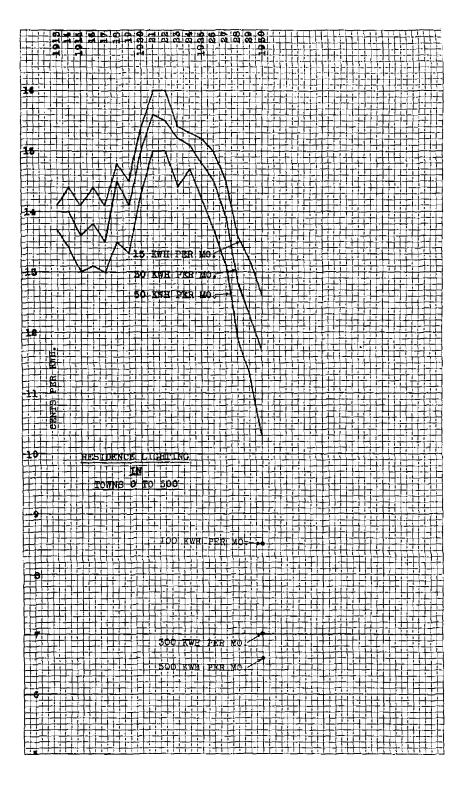
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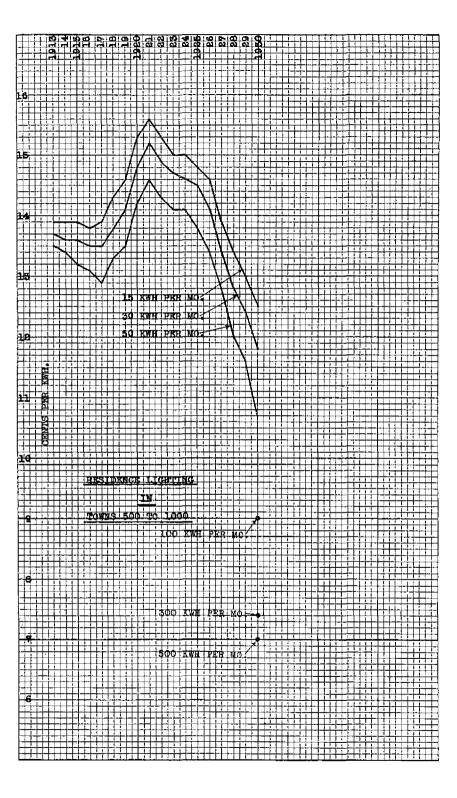
Population of towns.	Total No. of KWH used per month.	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930
0 to 500	30 KWH 100 KWH 200 KWH	13,8 13,1 12,7	12.9	12.1	12.3	13.4 12.1 11.6	14.0 12.5 11.9	13.9 12.4 11.9	13.2			13.8	14.8 13.8 13.1	13.5	$14.6 \\ 13.2 \\ 12.2$	14.2 12.7 11.7	13.4 11.3 10.1	12.8 10.6 09.3	12.2 09.8 08.5
500 to 1,000	30 KWH 100 KWH 200 KWH	13.8 13.3 13.1		12,7	13.6 12.6 12.2	13,5 12,2 11,6	14.0 12.6 11.9	12.9	13,4	13.6	13.3	13.1	13.1	12.9	14.1 12.6 11.6	12.0	11.2	10.7	11.9 09.9 08.6
1.000 to 1,500	30 KWB 100 KWH 200 KWH	12.9 11.9 11.4	11,9	11.8	13,1 11.8 11.1	11.7	12.0	12.1	12.5	13.0	12.7	12.7	12.7	12.4	13.8 11.9 10.7	13.5 11.5 10.3		10,1	$11.4 \\ 09.5 \\ 08.2$
1,500 to 2,500	30 KWH 100 KWH 200 KWH	12.0 11.1 10.6	10.9	10.6	10.6	10.6		11.1	11.8	12.3	13,4 12,2 11,3	11.9		11.6 10.5	13,0 11,5 10,4	11.4 10.2	10.8 09.8	10.5 09.4	11.8 10.0 08.8
2,500 to 3,500	30 KWH 100 KWH 200 KWH	11.6 10.9 10.3	10.7	10.5	10.2	11.3 10.2 09.3	12.2 10.7 09.7				12.0	11.7	11.6 10.4	11.1 10.0	11.7 10.2 09.1	11.5 10.0 08.9	09.7 08.4	10.5 09.3 07.9	10.0 08.6 07.4
3,500 to 5,000	30 KWH 100 KWH 200 KWH	11.2 10.3 09.5	09.8	09.5	09.1	09.1	11.0 09.7 08.8	09.5	10.3 09.4	11.0 10.1	10.9 10.0	10.4 09.6	11.4 10.0 09.1	10.0 09.0	09.9 08.8	09.7 08.7	10.7 09.0 08.0	10.4 08.9 07.8	10,2 08,3 07,1
5,000 to 10,000	30 KWH 100 KWH 200 KWH	11.1 09.9 09.1			08.8	08.7 07.5	10.7 08.8 07.5	09.0 07.6	09.6 08.1	09.8 08.3	09.6 08.1	09.5 08.0	09.5 08.0	09.4 08.0	09.3 07.8		10.3 08.5 07.1	09.9 08.0 06.6	00.4 07.4 06.2
10,000 to 20,000	30 KWH 100 KWH 200 KWH	09.9 08.9 08.3	08.2	08.0		08.7 07.6 07.1		07.9	08.3	08.6	08.4	1		08.3	08.2	08.0	07,8	08.2 07.4 06.7	$07.9 \\ 07.2 \\ 06.5$

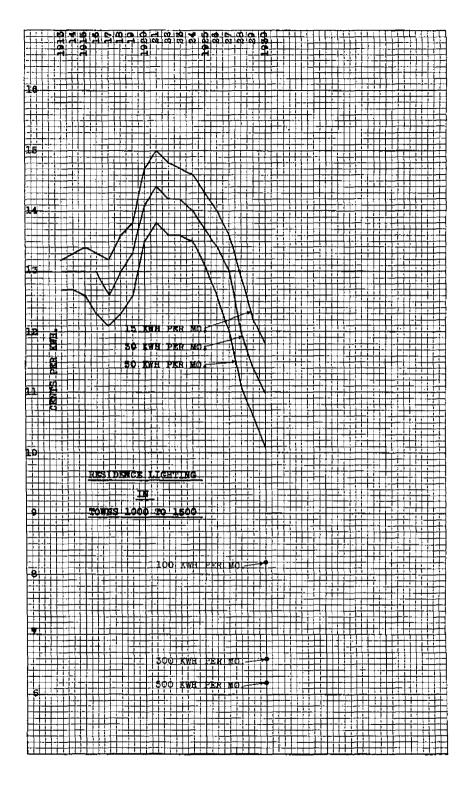
to 10	60 KWH 60 KWH 60 KWH	08.9 08.0 07.5	07.6 06.1 05.6	08.8 06.4 05.7	07.7 06.7 06.2	08.0 07.0 06.8	07.9 06.9 06.7	08.1 07.4 06.9	08.1 07.4 06.9	$08.1 \\ 07.4 \\ 06.9$	$08.1 \\ 07.4 \\ 06.9$	08,1 07,4 06,9	08.1 07.4 06.9	08.1 07.4 06.9	08.1 07.4 06.9	08.1 07.4 06.9	08.0 06.9 06.8	08.0 06.9 06.8	07.7 07.0 06.8
and 10	30 KWH 90 KWH 90 KWH	09.4 07.9 06.8	09.4 07.9 06.8		08.4 06.2 04.7	07.6 05.8 04.7	07.9 06.1 05.0	08.3 06.5 05.4	08.2 06.5 05.4	08,4 06,6 05,5	08.4 06.6 05.5	08,0 06,6 05,3	08.0 06.2 05.1	08.0 06.2 05.1	08.0 06.2 05.1	07.8 06.1 05.1	07.8 06.1 05.1	07.8 06.0 04.8	08.0 06.7 06.1

Popula- tion of towns.		-	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930
0 to 500	1,500	KWH KWH KWH		06.2 06.0 05.6	06.9 06.2 06.0	07.9 07.2 07.1	07.9 07.1 06.9	08.1 07.4 07.2	08.5 07.8 07.6	08.8 07.8 07.6		09.3 08.0 07.7	07.6		08.6 07.0 06.5	08.3 06.5 06.0	08.2 06.0 05.6	$07.4 \\ 05.2 \\ 04.7$	$07.4 \\ 05.2 \\ 04.7$	07.3 05.0 04.4
500 to 1,000	1,500	KWH KWH KWH	10.5 10.1 10.0	09.3 08.8 08.7	09.0 08.5 08.3	08.3 07.6 07.4	08.0 07.2 07.0	07.9 07.1 06.9	08.3 07.4 07.2	08.9 07.8 07.5	09.2 07.9 07.6	09.0 07.6 07.2	08.6 07.0 06.6		08.5 06.7 05.2	$08.4 \\ 06.2 \\ 05.8$	08,1 05,6 05,1	$07.8 \\ 05.4 \\ 04.9$	07.6 05.4 04.8	$07.2 \\ 01.9 \\ 01.4$
1,000 to 1,500	1,500	KWH KWH KWH	08.4	09.2 07.7 07.5	08.7 07.3 07.0	07.9 06.8 06.5	07.9 06.6 06.4	08.1 06.8 06.5	08.1 06.7 06.4	08,5 06,8 06,4	08.9 06.8 05.4	$03.7 \\ 06.6 \\ 06.2$	08.6 06.6 06.1		08.0 05.9 05.5	$07.9 \\ 05.7 \\ 05.1$	07,7 05,4 04,8	07.5 05.0 04.4		07.1 04.7 04.1
1.500 to 2,500	1,500	KWH KWH KWH	08.0 06.8 06.5	06.1	07.1 06.0 05.7	06.7 05.6 05.3	06.3 05.7 05.4	07.0 05.8 05.5	07.0 05.9 05.6	07.4 05.9 05.5	07.8 06.2 05.9	07.7 06.1 05.7	07.7 06.1 05.7	07.5 05.9 05.5	07.4 05.7 05.3	07.1 05.5 05.0	07,3 05,4 05.0	$07, 1 \\ 05, 2 \\ 04, 8$	07.0 05,2 04.8	06.7 05.0 04.6
2,500 to 3,500	1.500	KWH KWH KWH	07.4 06.3 06.0	05.5	05.9 05.7 05.3	06.4 04.9 04.6	06.4 05.3 05.1	06.5 05.3 05.1	06.5 05.3 05.0	07.7 06.2 05.7	08.0 06.4 06.0	08.2 06.5 06.0	08.1 06.4 05.9	$08.2 \\ 06.6 \\ 06.2$	07.8 06.2 05.7	07.7 06.0 05.5	07,4 05,5 05,1	07,2 05,1 04.6	07.1 05.0 04.4	06.7 04.8 04.3
3,500 to 5,000	1,500	KWH KWH KWH	06.2 05.4 05.2	06.0 05.2 04.9	05.8 05.1 04.9	05.9 05.0 04.8	05.9 05.0 04.8	06.3 05.0 04.6	06.2 05.0 04.6	$06.5 \\ 04.7 \\ 04.3$	07.0 05.1 04.7	07.0 05,1 04.6	06.9 05.0 04.6	06.5 04.8 04.4	06.8 04.7 01.2	06.7 04.6 04.2	06.5 04.5 04.0	06, 1 04, 5 04, I	06,2 01.5 04.1	$06.2 \\ 04.5 \\ 04.1$
	1,500 3,000	кун	04.1 03.7	03.9 03.5	05.6 04.0 03.6	05.6 04.0 03.6	05.5 03.9 03.5	05.9 04.3 03.9	06.1 04.4 04.0	00.8 04.8 04.3	06.8 04.7 04.1	$06.7 \\ 04.6 \\ 04.1$	06.7 04.5 04.0	06.7 04.5 04.0	06,6 04.5 04.0	06,4 04,4 03.9	$06.4 \\ 04.4 \\ 03.9$	06.0 01.1 03.7	06,0 04,1 03,7	05.8 01.1 03.7
10,000 to 20,000	1,500	KWH KWH KWH	03.8	06, 2 03, 9 03, 4	$06.0 \\ 03.7 \\ 03.2$	$05.8 \\ 03.5 \\ 03.1$	05.7 03.5 03.0	05.8l 03.6 03.1	$06.0 \\ 03.8 \\ 03.3$	$05.8 \ 03.7 \ 03.2$	05.9 03.7 03.2	$05.9 \ 03.7 \ 03.2$	$05.9 \\ 03.7 \\ 03.2$	05.9 03.7 03.2	$05.9 \ 03.7 \ 03.2$	05.7 03.7 03.2	05.7 03.7 03.2	05.30 03.5 03.10	$05.3 \\ 03.4 \\ 03.1$	$05.1 \\ 03.5 \\ 03.2$

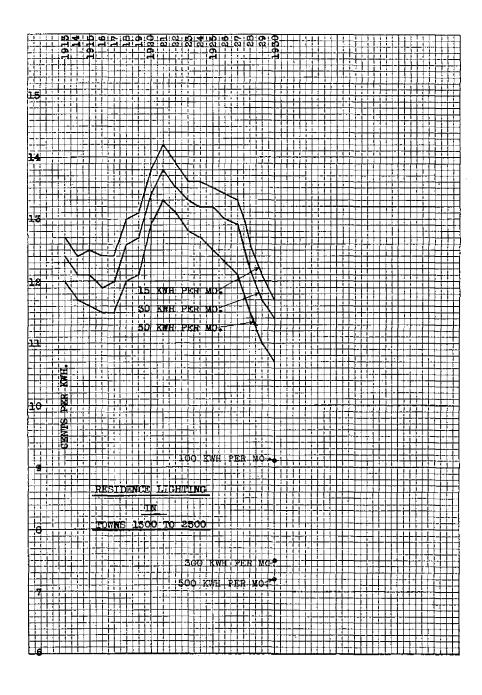
20,000 to 50,000	1,500	KWH KWH KWH	03.9	05.7 04.1 03.6	05.7 03.8 03.4	05.4 03.7 03.3	$05,3 \\ 03.6 \\ 03.2$	05.4 03.7 03.3	05.7 03.9 03.5	05.5 03.8 03.4	05,6 03,9 03,4	05.6 03.8 03.4	05.6 03.8 03.4	$05.6 \\ 03.8 \\ 03.4$	05.6 03.8 03.4	05.6 03.8 03.4	05.6 03.8 03.4	$05.1 \\ 03.6 \\ 03.2$	05.1 03.5 03.1	$05.1 \\ 03.5 \\ 03.2$
	1,500	KWA KWA KWA	03.5	06.4 03.9 02.9	06.4 03.9 02.9	04.6 03.6 02.8	05.3 03.8 02.8	$\begin{bmatrix} 05.3 \\ 03.8 \\ 02.8 \end{bmatrix}$	05.6 04.1 03.0	05.6 04.1 03.1	$06.5 \\ 05.1 \\ 03.7$	06.5 05.1 03.7	06.5 05.0 03.7	06.5 05.0 03.6	06.5 05.0 03.6	06.5 05.0 03.6	06.3 04.9 03.6	06.3 04.9 03.6	06.3 04.9 03.5	$06.4 \\ 03.9 \\ 03.3$

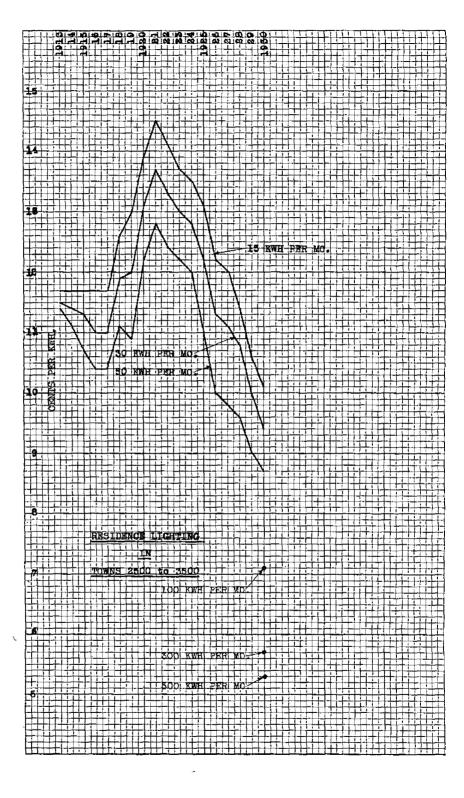


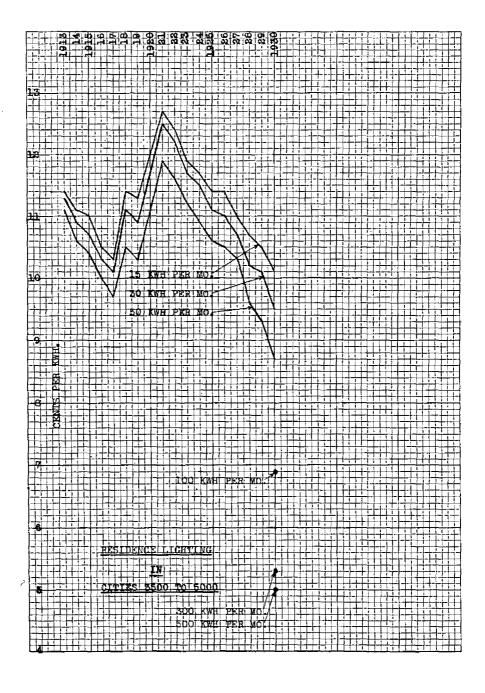


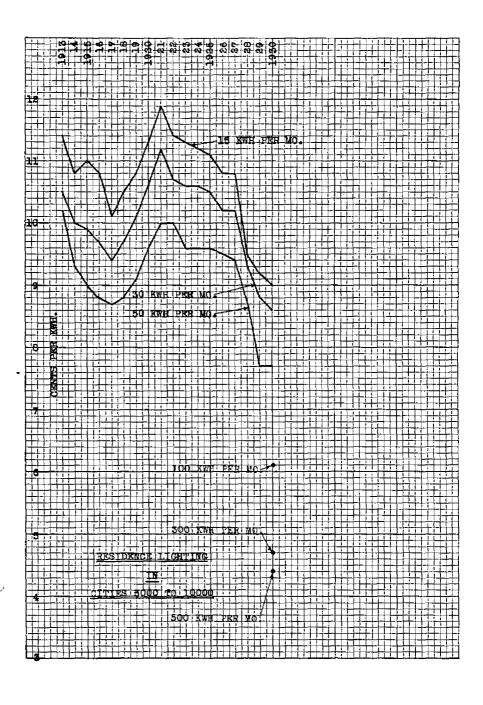


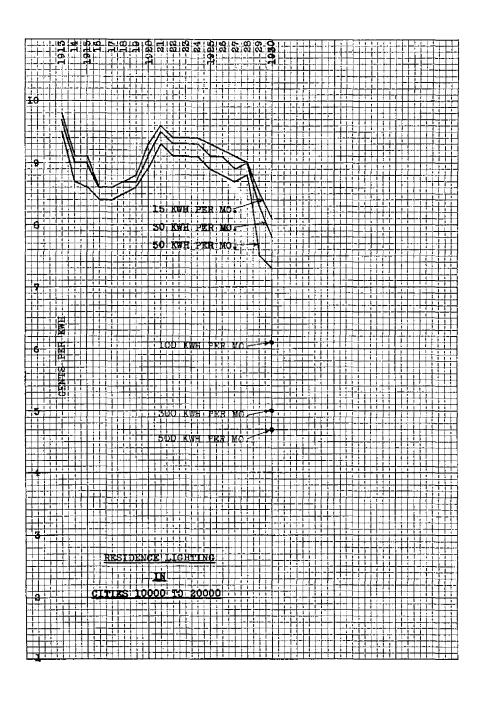
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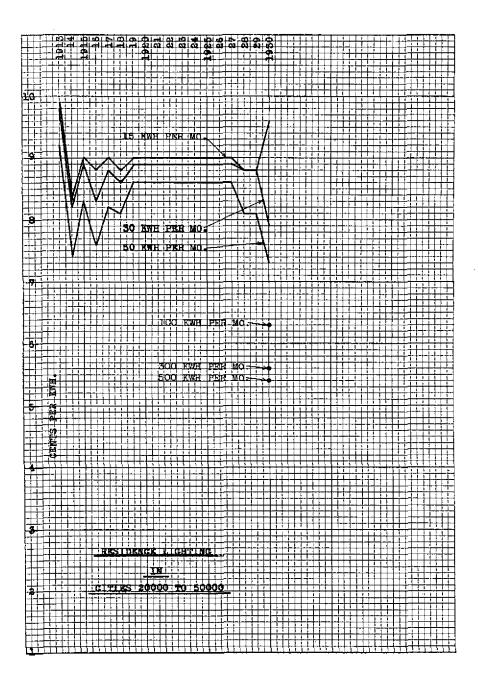


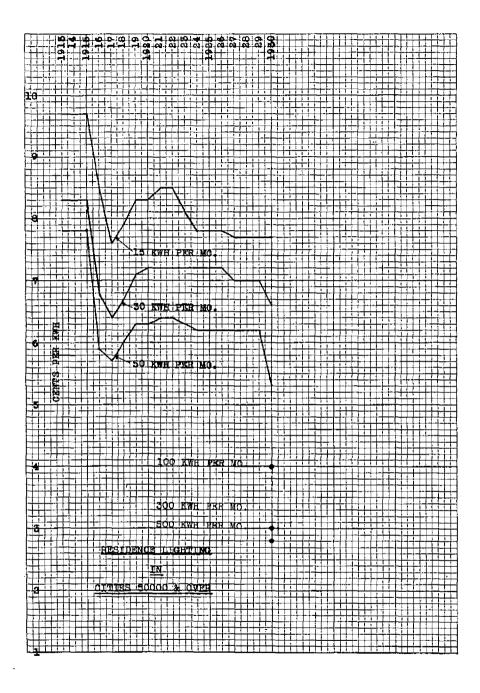


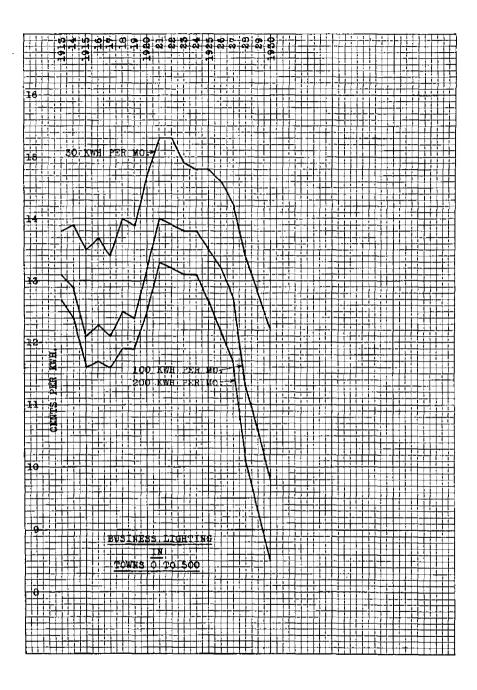


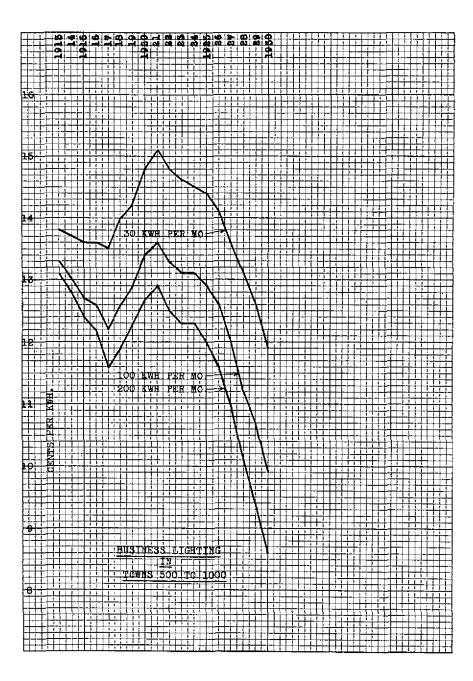


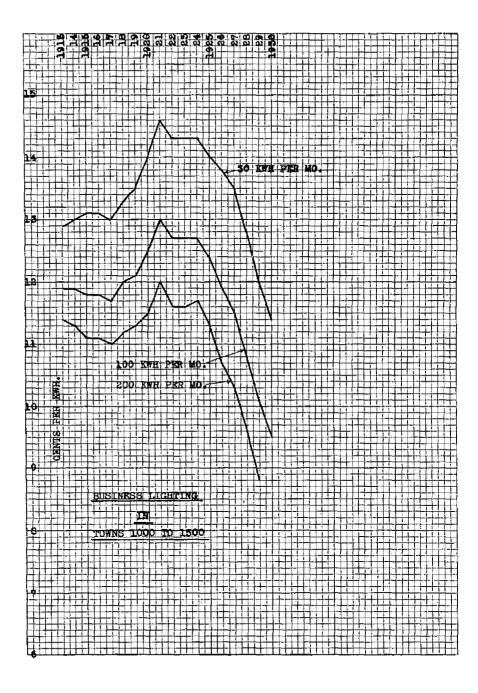


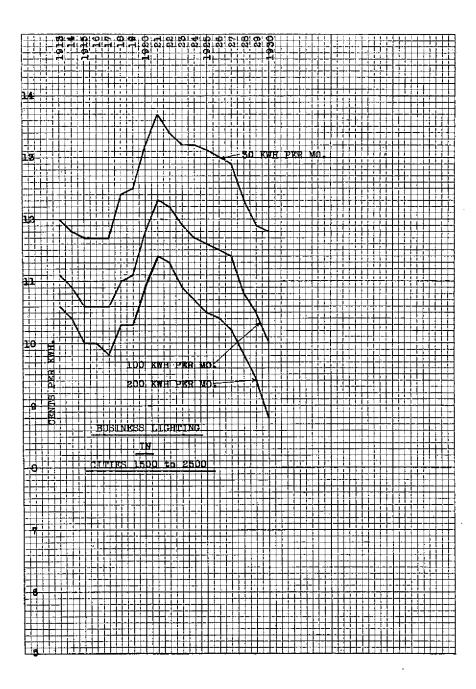


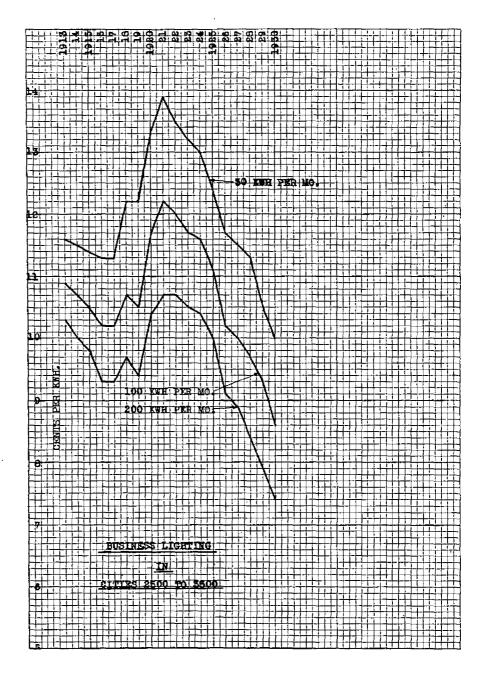


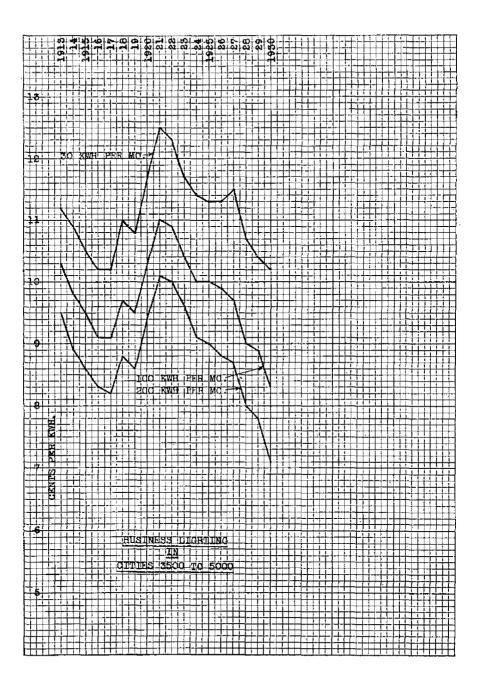


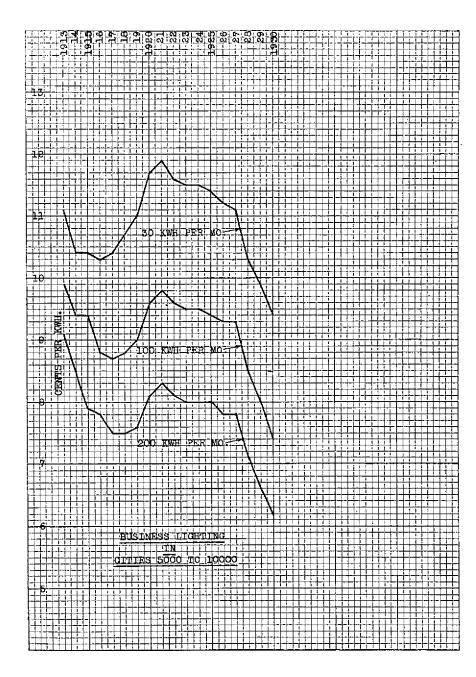


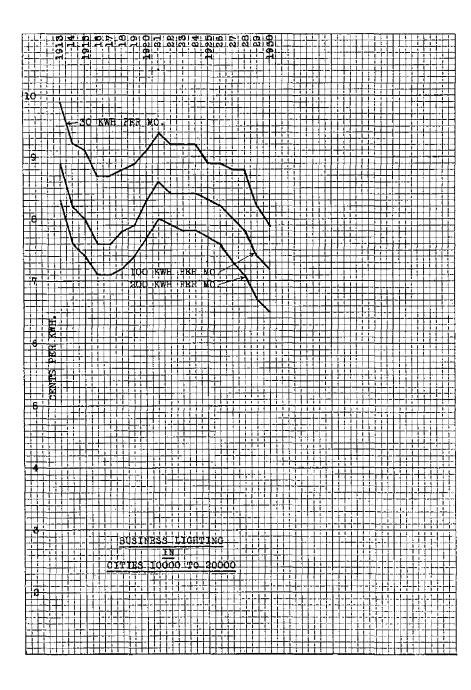


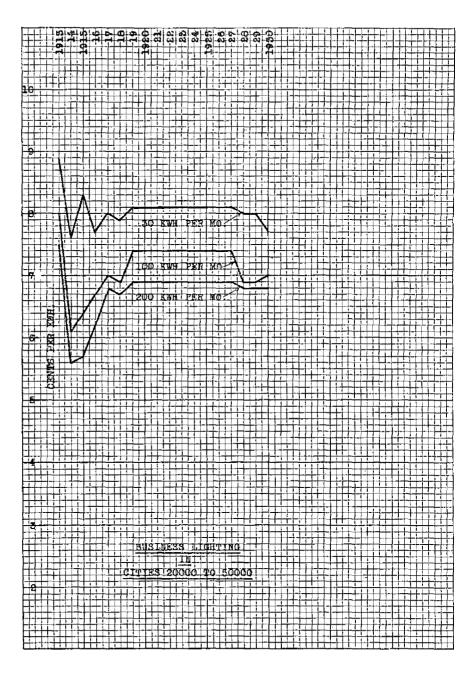


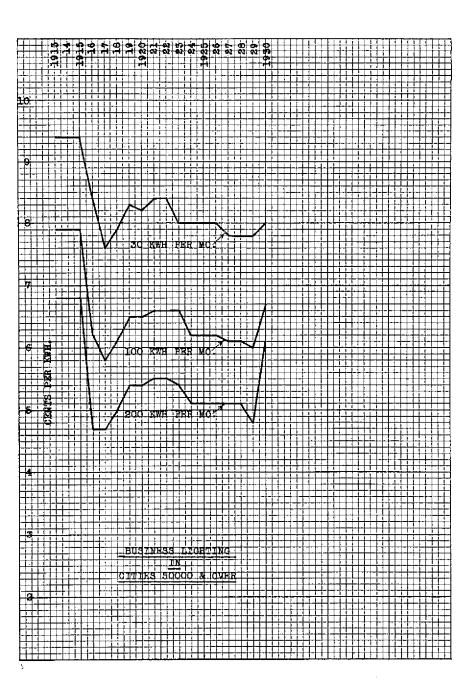


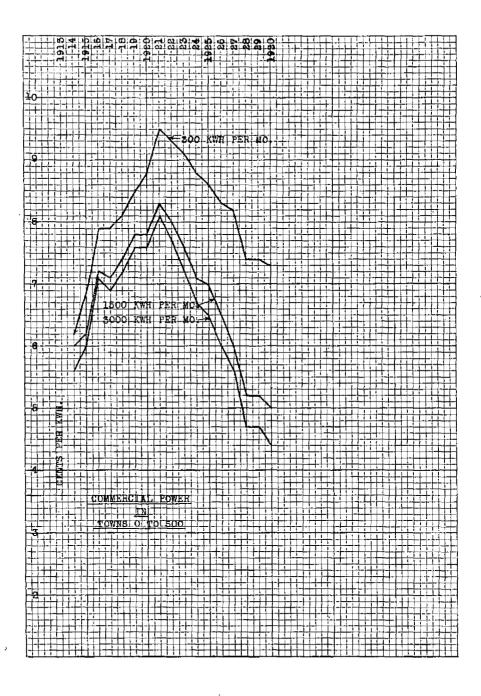


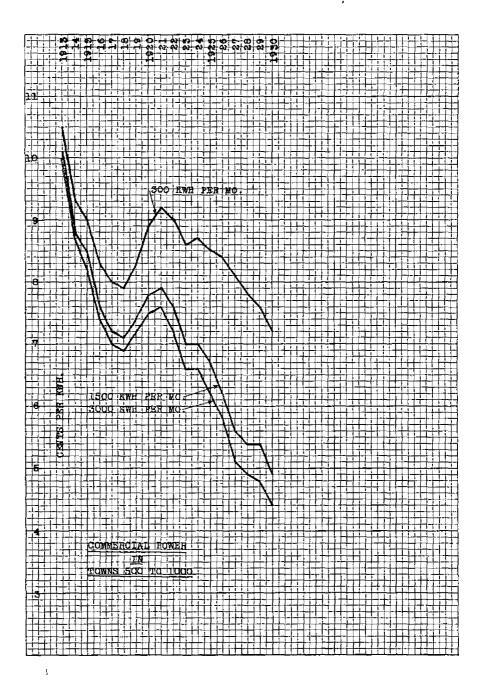


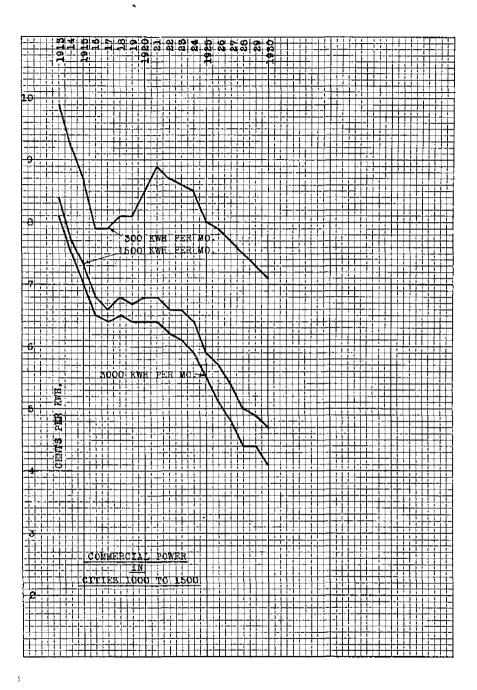


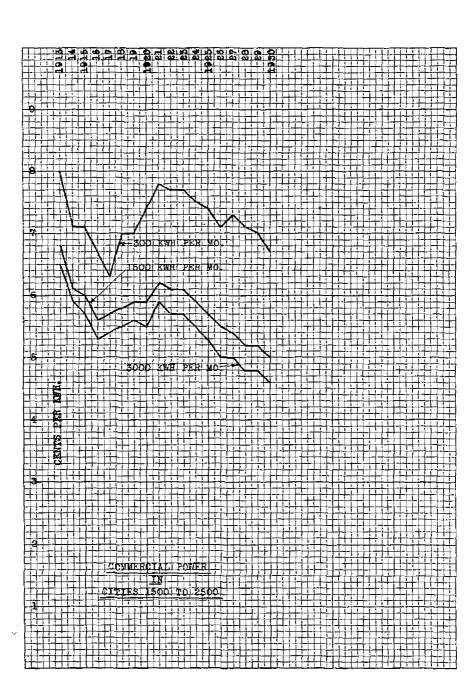


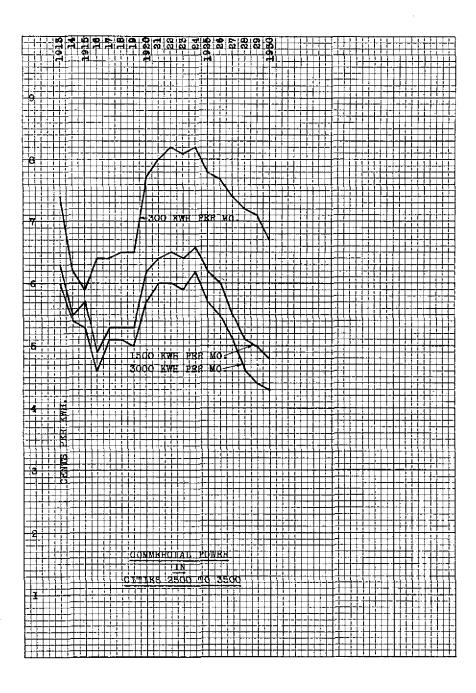


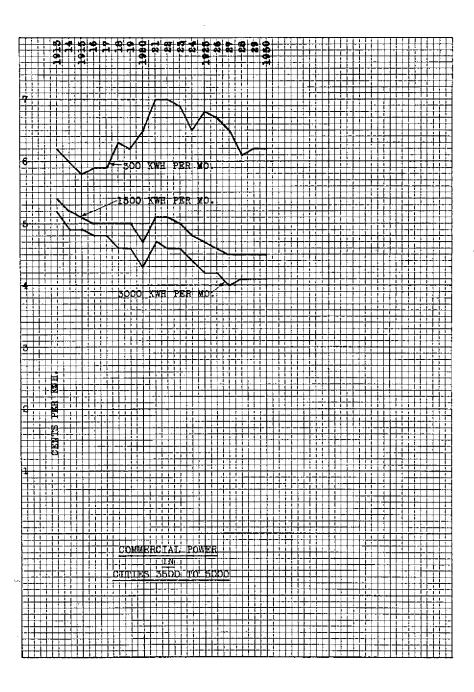


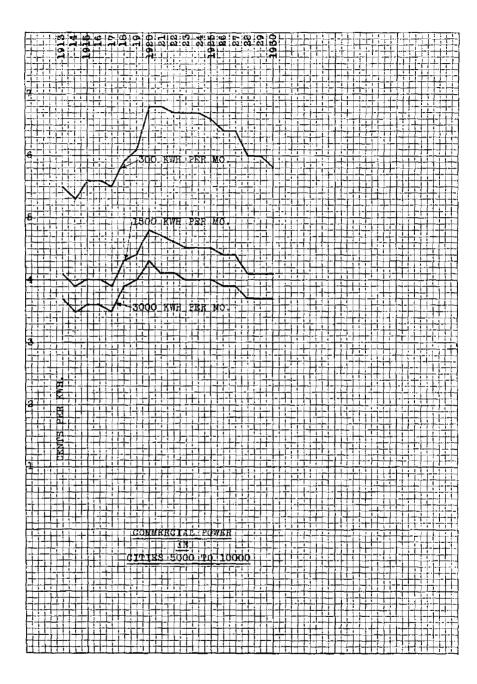


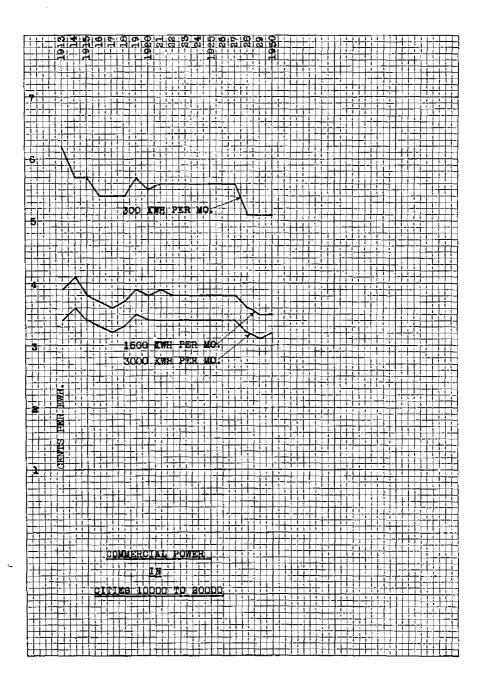


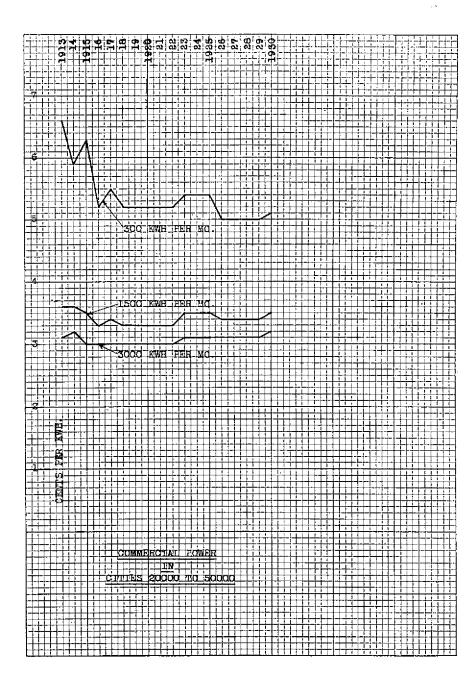


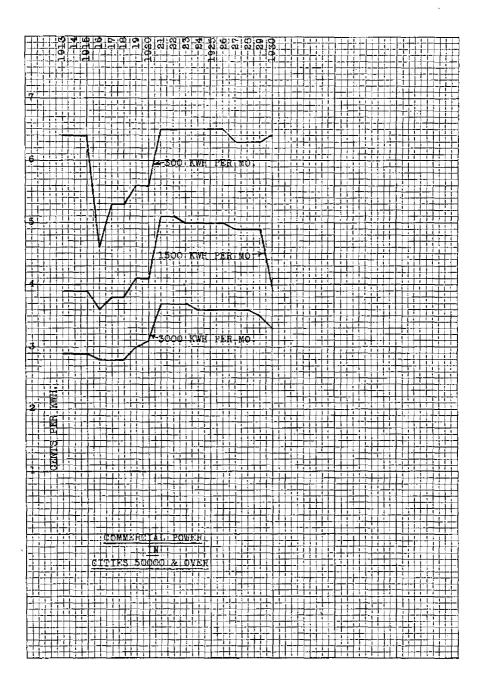












TELEPHONE AND TELEGRAPH DEPARTMENT

The duties of the employees of the Telephone and Telegraph Department, of which there are two, are as follows:

The keeping of an accurate record of all corporations furnishing telephone or telegraph service in this state which come under the jurisdiction of this Commission in accordance with the definitions provided by the Public Service Commission Law.

The keeping of an accurate record of all formal and informal cases filed with the Commission pertaining to telephone and telegraph matters. The adjustment of all correspondence complaints involving telephone or telegraph service. The filing of the schedules of rates of all telephone and telegraph companies. General inspection and test of telephone and telegraph service, and supervision of matters pertaining to quality and adequacy of telephone and telegraph service. General supervision of construction and operation of equipment by telephone and telegraph companies in so far as the public interest, public health and protection of public and employees are concerned. Miscellaneous technical work in giving of testimony and in making reports in connection with formal complaints, hearings and investigations before the Commission involving the rates and service of telephone and telegraph companies.

Telephone service is furnished in this state by approximately 553 companies through about 1,250 exchanges. Of this number 277 companies are what are defined in the Public Service Commission Law as telephone corporations doing business for hire and reporting to and under the jurisdiction of this Commission, furnishing service through 729 exchanges. There are also 276 companies which are known as mutual telephone companies, not serving the public for hire and not under the jurisdiction of this Commission, furnishing service through about 525 exchanges. The companies under the jurisdiction of this Commission own from one to eighty-two exchanges, respectively, as follows:

No. of exchanges.	No. of companies.	Total number of exchanges operated.
One exchange	235	235
Two exchanges	14	28
Three exchanges	9.	27
Four exchanges	1	4
Five exchanges	2	10
Six exchanges	1	6
Seven exchanges	3	21
Eight exchanges	1	8
Ten exchanges	1	10
Thirteen exchanges	1	13
Nineteen exchanges	1	19
Twenty-three exchanges	1	23
Twenty-four exchanges	2	48
Thirty-seven exchanges	1	37
Thirty-nine exchanges	1	39
Fifty-nine exchanges	1	59
Sixty exchanges	1	60
Eighty-two exchanges	1	82
Totals	277	729

During the past four years many telephone exchanges owned by the small companies have been purchased by holding companies. The number of companies owning exchanges and operating under the jurisdiction of the Commission in 1927 was approximately 552. This change in ownership caused many cases to be heard and orders issued by the Commission. The new owners in most cases made improvements in the service furnished the public. Local grounded circuit service was changed to metallic common battery service, and in several cases the companies filed with the Commission applications to increase the rates for service, which rates had been agreed upon by the officers of the telephone companies and the city and civil authorities. Petitions were presented to the Commission signed by many of the subscribers, asking for improved service and increased rates. were forty-one cases of this character acted upon, in thirty-six of which cases the rates were allowed, and in five cases the rates were rejected.

The number of formal cases filed during the two-year period was 160, and orders were issued in 153 cases. These orders had to do with complaints as to service, complaints of rates, sales of property, and other subjects.

The Bell Telephone Company filed a schedule, which was approved by the Commission, whereby the toll revenue in this state was reduced approximately \$212,000 per year. That company has during the past two years installed an underground cable system extending from St. Louis to Kansas City, Missouri, which will be part of the transcontinental underground system, and which will entail an outlay of approximately \$40,000,000.00.

Telephone service as a whole has been improved by the rebuilding of telephone exchanges, and rehabilitation of property.

Informal complaints, of which there were 217 filed and 223 closed (some being held over from the year 1928), cover complaints of various characters. They cover a large area and consist of complaints against service, collection rules, delay in installing telephones, alleged overcharges, etc., and many of them are settled before they become of sufficient importance to be made the subject of formal hearing and investigation. However, eleven of these informal complaints were made formal. That they are effectively handled is shown by letters received from the complainants, seven of which are shown below:

EXTRACTS FROM COMPLAINANTS' LETTERS DISMISSING THEIR COMPLAINTS AFTER THE COMMISSION HAD SATISFACTORILY SETTLED THEM

Informal Complaint No. 4597—"My phone is now in working condition, was put into operation June 3. Thank you for your services."

Informal Complaint No. 4550—"A telephone has been installed since I wrote you and the service is good. Thank you very kindly for your efforts in the matter."

Informal Complaint No. 4530—"I wish to heartily thank your honorable body for the interest you have taken in this matter which was responsible for the prompt settlement of this account."

Informal Complaint No. 4684—"I am now receiving very satisfactory telephone service. . . . Thank you very kindly for your service."

Informal Complaint No. 4708—"I now have the service I have been trying to get for six months. . . Thank you so much for your prompt service."

Informal Complaint No. 4710—"... this matter has been satisfactorily adjusted and we wish to express our appreciation for the prompt attention your department gave us."

Informal Complaint No. 4897—"I feel that our Public Service Commission is one of the best functioning of our State Departments."

While engineers and officers of telephone companies continue to state at hearings that there has been no reduction in the cost of material or labor which is necessary to conduct the telephone business and keep the plant up to a high standard, increases are granted only upon a showing being made that is without question proof of the necessity for such increases being allowed under the law.

TRANSPORTATION DEPARTMENT

This department supervises the regulation of railroad, street railroad, interurban, express and sleeping car companies. It checks every tariff schedule filed by any of these companies and brings to the attention of the Commission any violations of law, the tariff rules of the Commission, or the outstanding orders of the Commission. All tariffs, when accepted, are carefully indexed and filed.

This department maintains a complete file for the above mentioned companies of all tariffs containing Missouri State rates that have been filed since the organization of the Commission in 1913. The older tariffs have been bound in book form to preserve them. They are frequently resorted to in ascertaining the history of rates that are now in effect.

A NEW STATISTICAL SERVICE

The Transportation Department instituted in 1929 a new service for those interested in the operating results of Missouri Class 1 railroads. It made a careful compilation of statistics from the annual reports of all class 1 railroads operating in Missouri for the calendar years 1928 and 1929, and has published same in printed form. These statistics are available upon request to the Secretary of the Commission. Similar statistics have been secured from neighboring states and studies have been made currently comparing important operating results in Missouri with those in adjoining territory. These studies are used frequently in proceedings before the Interstate Commerce Commission in cases involving the reasonableness of freight rates on commodities produced or consumed in Missouri.

IMPORTANT CHANGES IN RAILROAD FACILITIES

There have been many changes in the railroad facilities of Missouri during the last biennial period.

ABANDONMENTS.

The entire lines of the Salem, Winona & Southern Railroad Company and of the Sligo & Eastern Railroad Company have been abandoned. The St. Louis-San Francisco Railway Company has abandoned 44.76 miles of branch line operation. The Chicago, Rock Island & Pacific Railway Company has abandoned operation on its tracks between Wallace and Edgerton Junction. All of the above mentioned abandonments were authorized by the Interstate Commerce Commission.

NEW CONSTRUCTION.

The St. Louis Southwestern Railway Company has constructed many miles of new line in Southeast Missouri, in furtherance of its plan to operate over its own tracks into Memphis, Tennessee.

The Chicago, Rock Island & Pacific Railway Company, through its subsidiary, the St. Paul and Kansas City Short Line Railroad Company, and in conjunction with the Chicago, Milwaukee St. Paul & Pacific Railway Company, has almost completed a new line into Kansas City, Missouri. Another completed railroad project is the new line from Grandview to Kansas City, placed in operation by the Kansas City Southern Railway Company in January, 1930.

The City of St. Louis has completed the south railroad approach to the Municipal Bridge, and the Alton and Southern established track connections with the Missouri Pacific Railroad in April, 1930, using this new approach. The Missouri Pacific Railroad Company also began operation of its new line into Cape Girardeau in October, 1929, using the tracks and terminal facilities in Cape Girardeau formerly owned by the Cape Girardeau & Northern Railway.

CONSOLIDATIONS.

During this biennium the Missouri Pacific Railroad Company acquired control of the Missouri-Illinois Railroad, which in turn controls the Mississippi River and Bonne Terre Railroad. These latter two are operated as separate units.

BAILBOAD BATE LITIGATION

This biennial period has been a most important one to Missouri shippers and to the railroads from the standpoint of railroad freight rate litigation. Most commodities handled in Missouri have at one period or another been the subject of a rate The Interstate Commerce Commission has continued its general investigation, I. C. C. Docket 17000, under the Hoch-Smith Resolution adopted by the United States Congress. addition to these investigations, under Docket 17000, many other cases of interstate rates, in which Missouri is interested. have been under investigation. The Interstate Commerce Commission has handled these general investigations cooperatively with the State Commissions, and members of the Missouri Commission have sat as members of the Cooperating Committees or have been present at many of the hearings involved in these These investigations have brought on the Transportation Department an unprecedented amount of work in accumulating data and preparing exhibits, presenting testimony at hearings, abstracting evidence from records made, preparing petitions, briefs and answers, and in making oral arguments at Washington, D. C., all of which were necessary in order that the facts as to Missouri might be present in the record and that the interests of Missouri might be protected.

This department also handled for the Attorney-General's office refund claims against the carriers for coal shipped to state institutions. The claims amounted to about \$50,000.

SOUTHERN MISSOURI FREIGHT RATES.

An important proceeding involving the rates in southern Missouri was instituted by the Interstate Commerce Commission in Docket 21772 on the petition of this commission and involves the class rates and the rates on numerous commodities moving from, to and between points in southern Missouri. Since the decision in Docket 9702 by the Interstate Commerce Commission southeast Missouri has had a class rate level much higher than any other portion of the state. A federal injunction prevented any interference by the Attorney-General or the commission with the collection of these higher rates by the railroads. Pursuant to a later decision of the Interstate Commerce Commission in Docket 13535, class rates were prescribed for

southwestern Missouri on levels higher than the maximum scales in effect on state traffic in the remaining portion of south Missouri not theretofore treated by the I. C. C.

The resulting effect was five different scales of class rates in Missouri. A similar situation existed on many commodity rates.

This department contended for one uniform scale of class and commodity rates for Missouri. The Missouri Commission instituted an investigation of the intrastate rates on its own motion, Case No. 6202, and cooperative proceedings were had at Springfield, Mo., beginning January 28, 1929. This department prepared and presented a very comprehensive showing in this proceeding, involving months of work. The evidence was carefully abstracted and briefed, oral argument has been had and final decision is pending.

There have been handled by the department many other cases of lesser importance, such as correspondence complaints, numerous requests for interpretation of tariffs, refunds of overcharges by railroads, changes in passenger train service, etc., all of which has resulted in such an increase in the work of this department that it is now much heavier than ever before. During the biennium it was found necessary to add an Assistant Rate Expert to the previous force, which consisted of a Chief Rate Expert and a stenographer. This force is still too small to handle properly all of the varied duties imposed upon the department.

MOTOR BUS DEPARTMENT

The personnel of this department consists of the bus supervisor, one inspector, and one stenographer.

For the biennial period ending November 30, 1930, the Commission has handled one hundred and sixty-four cases originating in this department. During 1929, ninety-seven cases were filed. In 1930, sixty-seven cases were filed. Of the cases filed in the above biennial period, one hundred and forty-eight have been disposed of by the Commission. Fifty-nine certificates of convenience and necessity were granted, twenty-four such certificates in 1929 and thirty-five such certificates in 1930; two interstate freight permits were issued; thirty-seven applications were either dismissed or denied; ten certificates were transferred; and forty miscellaneous cases were disposed of during the biennial period either by revocation of the certificates of convenience and necessity, or permission to abandon service, or by satisfaction or dismissal of the complaint. There are now in effect 168 certificates of convenience and necessity and three interstate freight permits. In 1930 there were licensed three hundred and forty-four busses with a seating capacity of 6,549 seats. For the biennial period ending November 30, 1930, there was paid into the state treasury in bus fees the sum of \$106,012.45. A record is kept in this department of all motor bus fees collected by the state treasurer.

This department keeps on file the insurance liability policies of all motor carriers under the jurisdiction of the Commission. This department also keeps on file time schedules and rate schedules of all intrastate motor carriers, said schedules showing the approval of the Commission.

The Supervisor participates in all hearings before the Commission involving motor carriers, assists in drafting the reports and orders issued relevant to same, and also assists in drafting special orders.

Since January 10, 1929, the Commission has maintained a bus inspector, who has been constantly on the highways inspecting busses to ascertain if they are operating in compliance with the laws of the State and rules of this Commission. The diligence of the inspector has resulted in increased efficiency and has added greatly to the safety of those traveling by bus and the general public on the highways. Prior to the employment of the

bus inspector several deaths had occurred due to collision of busses with other motor vehicles, with railroad trains, by carbon monoxide gas and other ways. Since he has been on duty there has been no one killed while riding on a bus in the State of Missouri, and the number of accidents in which non-passengers have been injured has been greatly reduced. Carelessness on the part of the drivers of motor busses has been reduced and several drivers of motor busses have been discharged as a result of the diligence of the motor bus inspector and the investigations of this Commission. Most of the complaints now reaching this Commission in regard to motor traffic are directed more particularly to freight carriers which are not under the authority of this Commission. It is impossible for one inspector to do as thorough inspection work as might be desired.

REPORTS OF THE COMMISSION

The Commission has to date issued seventeen bound volumes of its regular Reports (Mo. P. S. C.). Volume XVIII is now being compiled and will be printed and distributed during the coming year. In addition to the Reports, the Commission has compiled and published a Digest of the first eleven volumes of the Reports. This Digest (one volume) is divided into two parts: (1) a digest of cases reported; and (2) the Missouri Public Service Commission Law. Both the digest of decisions and reports, and the digest of the Law are annotated.

In these reports will be found the important reports and orders of the Commission for the period covered by the volume.

The publication of Advance Sheets for Volume XVIII has been temporarily suspended due to a shortage of funds, but will be resumed as soon as this volume is completed. These advance sheets are distributed without any additional cost to regular subscribers to the bound volumes but are available to anyone at \$0.35 per copy. Each issue of advance sheets is intended to cover approximately one-fourth the number of total cases which will finally appear in the bound volume and is published for the purpose of supplying attorneys for the public and for the utilities and those interested in the decisions of the Commission, with cases decided by the Commission several months in advance of the time they would normally appear in the bound volumes. The Commission was enabled to offer this better service to those appearing before it at a slightly increased cost over the cost of the bound volumes for the reason that type set for the advance sheets is held by the printer until final compilation of material for a single bound volume.

The value of these Reports is evidenced by the subscription list, on which are found attorneys, engineers, accountants, financial institutions, chambers of commerce, and some of our greatest educational institutions. During the past year there has been an unusual demand for and inquiries concerning these reports from the Universities and Colleges.

A great number of cases are handled by the Commission as "informal cases" which are not included in the published reports. Many other matters are handled through correspondence and in conference by the several departments in the regular

course of business, and are disposed of without being placed on the docket.

The bound volumes of the Commission and the Digest are sold at \$2.50 per volume.

FEES COLLECTED

In accordance with the provisions of Section 21 of the Public Service Commission Law, Section 10430 of the Revised Statutes of Missouri, 1919, this Commission has collected and paid into the State Treasury, since November 30, 1928, up to December 1, 1930, the following amounts:

December, 1928 For the year 1929 For the first 11 months of 1930	114,017.35
Total	\$346,394.41

This amount was collected for the following accounts:

Audits and appraisals Fees for bond issues Miscellaneous	22,692.40
Total	\$346,394.41